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Report of the Auditor General of Canada to the House of Commons

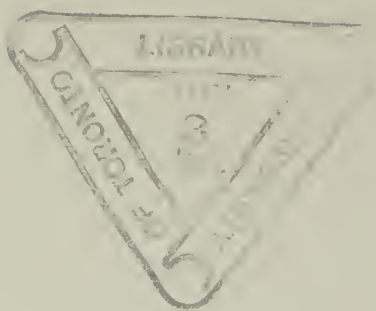
Fiscal Year Ended
31 March 1981

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Auditor General of Canada
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AUDITOR GENERAL OF CANADA

VÉRIFICATEUR GÉNÉRAL DU CANADA

The Honourable Jeanne Sauvé, P.C., M.P.,
Speaker of the House of Commons

I have the honour to transmit herewith my Report to the House of Commons for the fiscal year ended 31 March 1981, to be laid before the House in accordance with the provisions of section 7(3) of the Auditor General Act, S.C. 1976-77, c. 34.

A handwritten signature in cursive script, reading "Kenneth M. Dye".

Kenneth M. Dye, F.C.A.
Auditor General of Canada

OTTAWA, 1 December 1981

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REPORT OF THE AUDITOR GENERAL
TO THE HOUSE OF COMMONS
FOR THE FISCAL YEAR ENDED 31 MARCH 1981

INTRODUCTION

The principal functions and responsibilities of the Auditor General of Canada are set out in the Auditor General Act, *S.C. 1976-77, c. 34*, which came into force 1 August 1977. My responsibilities in respect to those Crown corporations for which I have been appointed auditor are set out in sections 76 to 78 of the Financial Administration Act, *R.S.C. 1970, c. F-10*. The Auditor General Act is included as Appendix A to this Report and the relevant sections of the Financial Administration Act as Appendix B.

In compliance with section 7 of the Auditor General Act, my Report for the fiscal year ended 31 March 1981 is presented herewith.

My examination included general reviews of the accounting procedures and such tests of accounting records and other supporting evidence as were considered necessary in the circumstances. My staff was provided with all the information and explanations required. I should like to express my appreciation and that of my associates in the Audit Office for the co-operation extended to us by officials of departments, agencies and Crown corporations.

The financial statements of the Government of Canada for the fiscal year ended 31 March 1981, which have been prepared by the Receiver General for Canada in accordance with the provisions of section 55 of the Financial Administration Act and appear in Volume I of the Public Accounts of Canada, have been examined by me as required by section 6 of the Auditor General Act. These statements and my opinion and observations thereon are reproduced as Appendix D to this Report.

Kenneth M. Dye, F.C.A.
Auditor General of Canada

MATTERS OF SPECIAL IMPORTANCE AND INTEREST

MATTERS OF SPECIAL IMPORTANCE AND INTEREST

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MATTERS OF SPECIAL IMPORTANCE AND INTEREST

1.1 This is my first annual Report to the House of Commons since being privileged to become Auditor General and, in this chapter, I comment on matters that seem to me to have special importance. I am also taking advantage of the fact that I am a new arrival in Ottawa to draw attention to issues that trouble me.

1.2 My point of view is that of someone coming for the first time upon the bureaucracy in all its sprawling immensity and puzzling entanglements. If there is a risk in first impressions, the offsetting risk is that familiarity and the comfort of habit may later dull my perception.

1.3 The nature of the Office of the Auditor General changed dramatically when the Auditor General Act was passed in 1977. That Act specifically provided for what has come to be known as comprehensive auditing.

1.4 The vision, innovative thinking and driving energy of James J. Macdonell fuelled the initial development of comprehensive auditing in Canada. His aim was to make the Office of the Auditor General a more sensitive and probing instrument. It was Mr. Macdonell's view that the Auditor General should not only fulfil his traditional role of informing Parliament as to the accuracy, probity and completeness of government accounting; he must also comment on the extent to which economy and efficiency are given due regard by public service managers, and whether those managers have procedures in place to measure the effectiveness of government programs.

1.5 The imaginative concept represents a major advance within the world of auditing. Mr. Macdonell will, I believe, be remembered as a great Canadian for this work on behalf of Parliament and the taxpayers.

1.6 I intend to give my continuing support and energy to the development of comprehensive auditing -- it must become a working reality throughout government. The commitment of this Office is to make value-for-money auditing increasingly effective in meeting Parliament's need for an incisive and accurate picture of the quality of management systems and practices within the public service. We will recognize particular achievements in efficiency and economy, striving for a fair perspective and focusing on particular details only where necessary.

1.7 At the same time, the Office of the Auditor General will re-emphasize the attest component of the comprehensive audit and continue to carry it forward

with vigour and skilled attention. Comprehensive auditing with its attest function at the core is an important concept whose time has come.

Reporting

1.8 In the past four years, 26 comprehensive audits have been carried out. Eight are reported here. This ongoing work, incorporating as its key element value-for-money auditing, has already led to important insights. We are convinced that a comprehensive audit, conducted by experienced personnel and carefully reported, is a very effective tool for line managers of departments and agencies who are responsible for achieving better management.

1.9 But the main purpose of the comprehensive audit is to be useful to the parliamentary committees responsible for dealing with the Estimates and Public Accounts of government organizations. To this end some problems need to be overcome. It is already evident that the increase in information made available through comprehensive audits adds to an already overloaded agenda for the Public Accounts Committee.

1.10 Releasing the results of our audits in a single annual report may not be the most productive procedure. It would be better for all concerned, it seems to me, to table the reports of particular comprehensive audits as they are completed. This view is supported by members of the Public Accounts Committee who have expressed a desire to deal with our findings and recommendations on a more timely basis. Completion-date reporting would achieve this timeliness for the Public Accounts Committee. The scheduling of Audit Office work would benefit substantially as well.

1.11 It might be possible to achieve more prompt reporting under section 8(1) of the Auditor General Act. This would be consistent with the recommendation in the Public Accounts Committee's First Report to the House of Commons, 18 July 1980, that "the Auditor General use more often his power to make special reports so that your Committee is able more often to examine current issues". The hazard, however, is that the frequent issuing of special reports may detract from the primary intention of section 8(1), which is to permit the Auditor General to alert Parliament to matters of pressing importance or urgency.

1.12 Therefore, my view is that we should seek authority to experiment with more frequent reporting. If it is found to be more useful for all concerned, an amendment to the Auditor General Act, permitting tabling of the results of our comprehensive audit reports as soon as they are completed, may be in order.

1.13 My own experience is with the terse, compressed style of private sector reports. I intend to impress upon this Office the merits of such clarity and

succinctness. Because auditing involves a great deal of patient and sometimes dogged examination, it is not surprising that, after such extensive work, some auditors have a human reluctance to turn in a brief report. However, the effectiveness of this Office lies in bringing to the attention of Members of Parliament only those matters that are material and significant.

1.14 While I give my full support to auditors who are accustomed to the requirement that they be courageous and forthright in what needs to be said, I will encourage my staff to be equally courageous in leaving unsaid those things which, having little significance, need not be said. At the same time, it is essential that our auditors continue to be mindful of their responsibility to be balanced and constructive in their observations, giving credit where credit is due and being reasonable and helpful in the recommendations they make.

Paper Burden

1.15 Coming to this Office from the private sector, I am vividly aware that business people throughout Canada associate governments with red tape, complex forms and myriad documents in duplicate and triplicate copies.

1.16 I am at once amazed by and concerned about this apparent proliferation of paper. We reviewed one aspect of this in our government-wide audit of Management of Photocopying, reported in Chapter 4. We found that departments and agencies of the federal government produce about 900 million copies on an annual basis. This is probably a conservative estimate. We also estimate, again conservatively, that government-wide costs, including labour, of making these copies are likely in excess of \$50 million a year. Even though these costs may be stabilizing, my suspicion is that there is tremendous room for cost reduction.

1.17 Our audit did not attempt to establish the extent to which copies being made were in fact necessary. No one knows, however, how much is being thrown out, how much is being copied needlessly, how much time is spent reading unnecessary information or how much additional storage space is needed to keep mountains of information long after the need has passed. The fight against red tape and paper burden is one that we can all join.

Auditing in Crown Corporations

1.18 Legislation is necessary to provide for comprehensive audits in all Crown corporations wholly owned by the Government of Canada. Only through such audits may Parliament be given independent assurance concerning systems and procedures related to financial and management controls.

1.19 The comprehensive audit would monitor the degree to which, in conducting the affairs of each corporation, there has been due regard to economy,

efficiency and effectiveness. This information is especially significant for the Directors of the corporations.

1.20 One has only to look at the objectives of various Crown corporations as set out in the Estimates to see beyond argument that the traditional financial audit cannot tell Directors or Parliament whether management practices have been consistent with the objectives approved by Parliament for Crown corporations.

1.21 For example, the objective of the Canadian Broadcasting Corporation is "to develop and provide a national broadcasting service for all Canadians in both official languages, in television and radio, and an international service, both of which should be primarily Canadian in content and character." The Canadian Film Development Corporation has the objective, "to foster and promote the development of a feature film industry in Canada." The Federal Business Development Bank's objective is "to promote and assist in the establishment and development of business enterprises, particularly small business in Canada." Canada Mortgage and Housing Corporation has the objective of promoting "access to adequate housing for Canadians at a cost they can afford in a sound community environment." These are just a few.

1.22 It is safe to say that experience with comprehensive auditing would soon convince even the most sceptical of its advantages to everyone concerned with managing and directing these corporations.

1.23 In my view, the results of such comprehensive audits should, in the first instance, be reported to management and the Directors of Crown corporations and then, if appropriate, to the responsible Minister. Only in an extraordinary situation, involving serious public concern, would it be necessary for this Office to report directly to Parliament.

1.24 It is important, however, to be clear that Parliament has a legitimate concern in respect of Canada's Crown corporations. The audits of wholly-owned Crown corporations, dependent on tax dollars for their existence, should be subject to audit by the Auditor General as an Officer of Parliament. Crown corporations that produce sufficient revenue to be considered commercially viable fall into a different category. Such corporations should be free to engage auditors from the private sector. For these corporations, the interests of Parliament and of the taxpayers should be additionally safeguarded by requiring that the Auditor General or his representative be entitled to receive notice of and attend Audit Committee meetings.

The Cost of Auditing

1.25 The cost of the comprehensive audit is greater than the cost of the traditional financial audit. Several factors are involved. Initial expense in

developing and refining the concept, including the training of those who undertake their first comprehensive auditing assignment, has been high. The multi-disciplined audit teams comprise skilled and experienced professionals.

1.26 In my commitment to ensure the growth of comprehensive auditing, one of my first tasks must be to ensure that the method becomes more cost-effective.

1.27 Comprehensive auditing clearly can save money through improved managerial and systems performance. This saving will be enhanced by discovering methods of reducing the cost of the audit itself. Just as random sampling can reduce the expense of the traditional attest audit, so new techniques must be developed to reduce the cost of the comprehensive audit.

1.28 The cost of audit extends beyond this Office. Since coming to Ottawa, I have become aware of the perceived duplication of audit activity that arises between the internal audit organizations in departments and agencies, the audit activities of central agencies, particularly the Treasury Board and the Public Service Commission, and the work of this Office.

1.29 We will endeavour to improve co-operation and co-ordination with the audit agencies within the government community. Managers rightly resent duplication, which takes them away from their primary responsibilities.

1.30 This Office will also continue to rely on the co-operation of public accounting and management consulting firms in the private sector to provide experienced assistance on contract and through the Public Service Commission's Interchange Canada program. These sources allow the Office to employ specialist talent and experience that would not otherwise be available, and to use it only when required. The approach is cost-effective and significantly improves the quality of our audit work.

1.31 We are indebted to the individuals and firms who participate. This continuing interrelationship has become a fine example of the kind of partnership between the private sector and government that provides better service to Parliament. An important by-product is that the pioneering work done in comprehensive auditing has been shared with the auditing community throughout Canada.

National Debt and Annual Deficits

1.32 A new Auditor General, concerned with economy and efficiency in government, becomes vividly aware of the long shadow of the National Debt.

1.33 The National Debt now stands at \$82.8 billion. Servicing the Debt in fiscal year 1980-1981 cost more than the total of all corporate income taxes collected. It accounts for more than one-fifth of every tax dollar, and its load burdens all the people of Canada like a huge, high-interest mortgage.

1.34 The existence of the National Debt underlines the importance of economy and efficiency in government operations. It is well to remember, however, that while the Auditor General shares with deputy ministers and other senior managers in government the responsibility for helping to achieve economy and efficiency in the use of money appropriated by Parliament, the deficits of recent years (\$12.7 billion for 1980-81 and budgeted at \$13.7 billion for 1982-83) reflect political decisions.

1.35 These deficits result, at least in part, from Government policy which is outside the purview of my Office. However, should there be the political will to reduce these deficits, it will take not only the efforts of managers within the public service but also the dedicated support of their ministers.

The Role of the Audit Office

1.36 As many a major corporation in the private sector has discovered, it is remarkably difficult to say precisely what business one is in. It might be expected that the 1977 Auditor General Act clearly established the objectives of this Office. But I have not found that to be so.

1.37 In the private sector, the auditor is appointed by the shareholders and provides his report, with such explanations as he deems necessary, to the Directors who in turn present it to the shareholders. The auditor will advise management formally by management letter and, less formally, may provide counsel and advice. In matters of probity, disclosure and sound accounting practices, management ignores the auditor's findings and advice at its peril.

1.38 The roles, however, are clear. The manager must make decisions. The auditor examines, counsels and reports.

1.39 Although audit work frequently leads to significant improvements, it is doubtful that the private sector auditor ever sees himself as primarily an agent of change. He is not tempted to imagine that he has a seat on Olympus.

1.40 The relationship is more complex in the public sector. The ultimate shareholders are the citizens, represented by Members of Parliament. But there is no single management in the hierarchical sense as there is in a corporation. Each department and many agencies and Crown corporations must be considered separately, and then the whole must be brought together, usually without benefit of the bottom line as a common performance indicator.

1.41 Because of this complexity, there are those in and out of Parliament who believe that the Auditor General has a unique role which should go well beyond that of the auditor in the private sector. Those holding this view believe that the Auditor General should operate as a primary agent of change, that he should use the power of his Office to achieve such change by persuasion, disclosure and tenacious repetition.

1.42 Others, again both in Parliament and outside, believe that the Auditor General fulfils the function of a competent, professional auditor in the private sector. He conducts investigations, advises and assists management and reports without fear or favour. He is not, however, required or expected to attempt to force his suggestions for improvements on the senior officers of the public service. Those concerned ignore his findings and advice at their own risk, precisely as in the private sector.

1.43 This view, however, acknowledges that there are many situations where the auditor's observations and recommendations leave room for debate, since management is rarely such a precise science that there is one and only one acceptable course of action to overcome a problem.

1.44 I want it to be clear that my own commitment is to this second viewpoint.

1.45 It seems to me desirable that, as a minimum, my Office should continue to pattern itself on the highest standards of the auditing profession in the private sector. These are standards respected throughout the world. This approach is calm and constructive and, I believe, gives confidence to Members of Parliament, Cabinet, managers in public service, and the taxpayers, that government operations are being audited effectively.

1.46 This does not mean that the Auditor General may not come down hard and, if necessary with careful aim, where, in his view, the public interest is clearly at stake. But if he sets his course on the best standards that have developed in the private sector, the temptation to play Zeus is automatically removed. More importantly, this approach allows the relationship between the Office of the Auditor General and the managers of the public service to be creative and constructive.

1.47 I would like to add here that, when I arrived in Ottawa, I was aware of a widely held opinion that the quality of managers in the public service was suspect. Having now had the opportunity to meet a representative number of deputy ministers, heads of Crown corporations and other senior officials, my first impression is that, like their management colleagues in the private sector, they are highly motivated, hard working, intelligent and represent a wide diversity of experience.

1.48 Although it is my responsibility to criticize their efforts constructively, I am already very much aware of some of the complexities they face in converting the policies of elected representatives into programs that deliver economic, efficient and effective service to the public.

Improving Accountability

1.49 In saying that it is my intention to pattern the activities of the Office of the Auditor General on those of the best practices in the private sector, I am not overlooking our unique role.

1.50 I firmly believe that we can and must influence the attitude of government and the Canadian people toward better management of the tax dollar. We will work with the Office of the Comptroller General and operating managers to encourage a full measure of control and accountability in the expenditure of the tens of billions of dollars collected and disbursed by the Government of Canada.

1.51 My hope is that, by the time my ten-year term of appointment is completed, all government employees will work consciously and with pride to achieve economy, efficiency and effectiveness and that they will be supported at all levels of management and in the Cabinet. I believe all Canadians should insist on getting a dollar's worth of goods and services for every dollar they spend personally or pay in taxes.

1.52 The Auditor General reports to the whole House of Commons, but the Public Accounts Committee is his specific client. The nature and significance of the partnership between the Auditor General and the Public Accounts Committee is perceptively analysed and clearly set out in the recent report issued by the Canadian Comprehensive Auditing Foundation entitled *Improving Accountability -- Canadian Public Accounts Committees and Legislative Auditors*, co-authored by John J. Kelly, an Assistant Auditor General of Canada, and Hugh R. Hanson. This report emphasizes that, while both the Public Accounts Committee and the Auditor must be strong and independent of each other, it is only by working together that they can help Parliament hold the Government accountable.

1.53 I support the authors in their view that the Public Accounts Committee's systematic examination is a critical factor in making the Auditor General's Report a potent influence for better administration and reform.

1.54 In my view, the authors may underestimate the attention given by the House of Commons and the media to the Auditor General's reports both when they are issued and when they are discussed by the Public Accounts Committee. This attention produces a wider audience and, therefore, a wider concern for matters of significance. It is my intention to work closely with the Public Accounts Committee in the conviction that it will assist both of us to be more effective.

1.55 Under the leadership of the President of the Treasury Board, the Honourable Donald J. Johnston, high priority has been given to achieving a greater degree of accountability both on the part of the public service to Ministers of the Government and on the part of the Government to Parliament.

1.56 I am pleased to note that these strategies for reform pay attention to accountability and efficiency in financial administration. Government has been responding to the work of the Lambert Royal Commission on Financial Management and Accountability. The programs of reform are described in a publication called "Accountable Management", issued as a progress report to Parliament by the President of the Treasury Board in March 1981.

1.57 The key changes in the system of financial administration are the establishment of a multi-year fiscal plan which includes multi-year projections of the government's anticipated revenues together with its expenditures for specified functions of government. Equally important is a new Policy and Expenditure Management System, designed to help improve policy making and priority setting by government as well as improve expenditure control and accountability.

1.58 This envelope system aims to enable ministers to control expenditures from the top down and to resist pressures from the bottom. It is intended to decentralize decision-making authority and increase direction and control over policy, planning and expenditure decisions. Through the system, managers can plan further into the future, thus being able rationally to meet changes in priorities. The establishment of goals for deputy ministers and other senior managers will, it is hoped, make it possible to identify management strengths and weaknesses. The Comptroller General's Improvement in Management Practices and Controls (IMPAC) program further reinforces these initiatives.

1.59 It is too soon to judge the effectiveness of this work directed toward better management and increased accountability. However, the effort is clearly in the right direction and has the full support of my Office. As a beginning, we are organizing our internal division of audit responsibility to accord more closely with the envelope system.

1.60 Chapter 5 of this Report reviews the progress being made by the Comptroller General's IMPAC program in government departments and agencies. This major initiative involves 30 departments and agencies which account for some 85 per cent of government expenditures, not including the Public Debt, and some 300,000 person years.

1.61 The program was planned in three stages: first a survey, then the development of an action plan and, finally, implementation. IMPAC should result in improved management and tightened controls on the expenditure of public money.

1.62 In some departments, progress against the original schedule is, in my opinion, disappointingly slow. The explanations may appear logical and reasonable enough in light of the complexities of government and the IMPAC process. However, they support the folk-wisdom repeated like an article of faith that the public service is cumbersome, slow in its movements and extremely difficult to turn around. But the delays raise the very real question of whether enough public service managers attack their jobs with a sufficient sense of urgency. For beyond the problems of complexity, shortage of skilled personnel, limitation of resources expressed in dollars, and competing priorities, is the question of attitude. No matter how intelligent, how experienced or how skilled a manager may be, if he lacks that sense of urgency, that relentless drive to get the job done, there are always plausible reasons for taking a little more time.

Access to Information

1.63 I come now to a problem that is rarely encountered by the vast majority of auditors in the private sector. It is access to information.

1.64 In the private sector, it would be most unusual for corporate officers to deny the auditor access to information that he considers material to the audit. Curiously, in the public sector, there are nice intellectual arguments, supported by political science theory, as to what documents and information should and should not be available to the Auditor General.

1.65 The problem is to establish a balance between the legitimate secrecy of political deliberations in Cabinet and information of audit significance used by Ministers and senior officials in making financial and management decisions. Access to the latter is fundamental if I am to discharge my responsibilities under the terms of the Auditor General Act, and serve Parliament well.

1.66 At this stage, I will content myself with reporting my uneasiness at the reluctance my auditors encounter from time to time in departments and agencies where I would expect complete openness. I intend to keep a watchful eye on the experience of my auditors in the year ahead. The matter clearly requires further study.

Information for Parliament

1.67 Improved information for Parliament is an essential prerequisite to financial accountability. The Comptroller General is very much aware of this and his Office has made substantial progress in revising the Estimates during the past year. A new Government Expenditure Plan was tabled with the 1981-82 Blue Book and four much improved departmental presentations, illustrating the intended structure and content of Program Expenditure Plans, were tabled as well. More departments and agencies will follow these prototypes this year. I am pleased to note that the President of Treasury Board expects the Estimates for all departments to be revised by 1985.

1.68 Wherever possible, Program Expenditure Plans will identify expected results and relate these to program objectives. The intention is to provide performance and financial information together with related explanations, rather than the frequently baffling financial tables and short, vague narratives of the current Blue Book.

1.69 The prototypes we have seen are open to improvement. But they go a long way toward meeting the recommendations of the Public Accounts Committee, the Royal Commission on Financial Management and Accountability and our Office. The project has my full support.

1.70 If we are to have more informative Estimates and Public Accounts, however, more attention must be given to management information systems. Our comprehensive audit findings indicate that improvements are required so management will have the information it needs to manage, and Parliament will have the information it needs to ensure accountability for the resources used. The inability of some departments to provide essential data this past year for their illustrative Program Expenditure Plan underscores the need for further work.

1.71 To help departments and agencies prepare for revising their Estimates, we include sections entitled Information for Parliament in many chapters of this Report. We identify specific types of information for each entity that will help Members of Parliament gain a better understanding of the requests for resources and where they will be allocated. It will also aid them in monitoring the results.

1.72 We do not attempt to write a complete table of contents for each departmental Program Expenditure Plan, but concentrate on identifying some of the more significant features of the department or agency that should be described in its Estimates.

1.73 We also point out particular features, such as operational objectives or performance information, where further work is required to ensure benefits to both managers and Parliament.

1.74 A year ago, this Office noted that departmental systems were being revised to accommodate management's needs for information as identified by IMPAC Action Plans and the government-wide requirements of the Policy and Expenditure Management System. We suggested that Members of Parliament make their own information needs known while departments were developing improved systems.

1.75 Parliamentarians have now assessed departmental Program Expenditure Plans to see if they do indeed meet their needs. As requested by the Public

Accounts Committee, a senior officer from the Comptroller General's Office, together with a representative from my Office, interviewed 25 Members of Parliament. They reacted favourably to the concept as well as to the specific charts, narrative and figures presented to them.

1.76 The Comptroller General and selected departments are now proceeding with further Estimates revisions, taking into consideration the comments of Members of Parliament.

1.77 Recently my attention was caught by another matter that had to do with the Estimates. This was the subtle distinction in the wording of Votes. These distinctions influence subsequent financial reporting and accountability to Parliament. Crown corporations are particularly involved. Minor variations in the form of appropriations for operating expenditures, often involving only a few words, are being used by Crown corporations as justification for retaining unspent parliamentary appropriations. This non-lapsing of funds voted for annual expenditures may result in circumvention of parliamentary control. The implications of this practice require review. My Office has therefore begun an examination.

Generally Accepted Government Accounting Principles

1.78 My opinion on the Government's financial statements as published in Volume 1 of the Public Accounts of Canada is qualified. In my view, the accounting policies which the Government follows result in a significant overstatement of reported assets and understatement of reported liabilities.

1.79 Moreover, there is a need to reconsider the purpose and the current and potential use of the Government's financial statements. The audited financial statements include only the activities of government "departments" as defined in the Financial Administration Act and, since many government activities are carried out by organizational entities which are not "departments", significant assets, liabilities, revenues and expenditures are excluded from the financial statements. The Government should prepare summary financial statements that provide a comprehensive and complete summary of its financial position and its revenues and expenditures.

1.80 Unfortunately, there are, at the present time, no generally accepted accounting principles appropriate for governments in Canada. As a result, we lack generally agreed upon objective standards of good accounting and reporting practice that readers of the financial statements have a right to expect, and against which the statements could and should be audited.

1.81 Recognizing this lack, the Canadian Institute of Chartered Accountants established, in June of this year, a public sector accounting and auditing committee to recommend accounting and auditing principles and practices for

Canadian governments. I sincerely hope that this committee will have the active support and encouragement of all governments in Canada. Its task is formidable.

1.82 My trust is that the committee's work will result in generally accepted government accounting principles for the years ahead.

The Office

1.83 When I examined the way my Office has been presenting its Estimates, I was struck immediately by the fact that our stated objective was incomplete and out of date. After much discussion with my colleagues and consultation with counsel, we established the objectives set out below. They will, I hope, make it easier for all concerned to understand what it is we are trying to do and to judge whether or not we are achieving it.

1.84 The Auditor General is an Officer of Parliament, governed by his legislative mandate. His objectives are:

1. To make independent examinations of the accounts of federal departments and agencies and of other entities for which he is the appointed auditor, and to express his opinion on their integrity.
2. To make such independent examinations and inquiries as he considers necessary and, based on them, to report on whether or not there were significant deficiencies in the management control systems and practices in the audited entity during the period under examination; thereby providing reasonable assurance, where possible, that
 - public assets are safeguarded and controlled;
 - transactions are lawful and proper;
 - financial, human and physical resources are managed with due regard to economy and efficiency, and procedures are in place to measure and report the effectiveness of programs.
3. To call attention to anything that he considers to be of significance and of a nature that should be brought to the attention of the House of Commons, to communicate his findings and observations to management of the audited entity and to make any constructive recommendations he may have.
4. To maintain the stature of his Office, share its expertise with domestic and international colleagues and contribute to the development of comprehensive audit methodology and practices.

5. To manage his Office with due regard for economy, efficiency and effectiveness, ensuring professional and administrative competence and adherence to applicable government policies.

1.85 In addition to setting out the objectives of the Office, I would like to draw attention to some of the events that have taken place since I came to the Office. I have already paid tribute to Mr. James J. Macdonell. Other senior members of the Office have made important contributions.

1.86 Upon Mr. Macdonell's retirement, Michael H. Rayner was named Acting Auditor General and directed the work of the Office through to the end of the fiscal year. I am indebted to Mr. Rayner for his balanced direction of the Office during this period. With his senior colleagues, he carried on the work with enthusiasm and determination.

1.87 In August 1981, Rhéal Chatelain, Senior Deputy Auditor General since 1974, accepted the post of Auditor General of the Province of Quebec. We shall miss his experience and counsel, but are proud that Mr. Chatelain has been recognized in this way. I look forward to working with him in the regular meetings of Canada's legislative auditors.

1.88 In an effort to avoid preaching to others while indulging ourselves, we are in the process of reducing the amount of office space we occupy. In giving up some of the space we have occupied and locating our Ottawa staff in one building, we expect substantial savings.

1.89 We are studying ways and means of directing more of our available resources to audit operations within the Office. This can be accomplished in part by a greater reliance on modern office technology and systems, but it will require from all of us in the Audit Office that attitude to economy and efficiency that we expect of all departments and agencies of government.

* * * * *

1.90 This annual Report sets out the findings and recommendations related to three government-wide audits -- Research and Development, Payroll Costs Management and Management of Photocopying. As well, it contains the results of our continuing monitoring of the Comptroller General's IMPAC program. Eight chapters report the observations and recommendations arising from comprehensive audits of the following organizations:

- Canadian Radio-television and Telecommunications Commission;
- Department of Consumer and Corporate Affairs;

- Department of Fisheries and Oceans;
- Department of the Solicitor General - Correctional Service of Canada;
- Department of the Solicitor General - Royal Canadian Mounted Police;
- National Museums of Canada;
- National Research Council of Canada; and
- Post Office Department.

In addition, there is a chapter containing observations on the financial statements of Crown corporations audited by this Office and another with observations reported under sections 7 and 11 of the Auditor General Act. The Act is reproduced in Appendix A to the Report.

1.91 Each chapter dealing with a government-wide or comprehensive audit includes a statement of the audit scope and a summary of audit observations arising from the work conducted during the year. A detailed table of contents precedes each chapter of the Report.

1.92 In the interests of economy and since each chapter is summarized in this Report, a separate Conspectus has not been produced this year.

RESEARCH AND DEVELOPMENT

RESEARCH AND DEVELOPMENT

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RESEARCH AND DEVELOPMENT

Introduction

2.1 The federal government spends money on two kinds of science and technology activity -- Research and Development (R&D) and Related Science Activities (RSA). Research and development is defined as "creative work undertaken on a systematic basis to increase the stock of scientific knowledge and technology". Expenditures on research and development, excluding certain Crown agencies, support the effort of a reported 15,000 persons in the federal government. Forecast expenditure for 1980-81 on R&D in government laboratories was about \$621 million out of a total federal government R&D forecast of \$1,211 million. The remaining \$590 million was spent in non-government facilities or institutions either on contract work or as grants and contributions. The majority of this amount was spent on grants and contributions.

2.2 Related Science Activities include mapping by the Geological Survey of Canada, hydrography by the Oceans Science and Surveys Division of the Department of Fisheries and Oceans, and all the work conducted by Statistics Canada in characterizing the Canadian economy and population. In 1980-81, forecast expenditures for RSA were \$691 million. About 86 per cent of RSA is performed by 14,000 federal government employees; the balance is largely carried out by the private sector on a contract basis.

2.3 This report covers R&D only; our examination did not extend to Related Science Activities.

2.4 For many years, there have been discussions about a Canadian Science Policy. In 1962, the Glassco Commission reviewed federal science activities and recommended establishing mechanisms for developing a national science policy. It also recommended introducing central co-ordination processes to pursue the objectives of that policy. From 1968 to 1972, the Lamontagne Committee reviewed national science activities and the federal role in science and made several recommendations related to the central co-ordination of science and technology. A strong central co-ordination function for Research and Development does not exist in the federal government. Money is voted for programs in different departments and agencies and, in some cases, is spent on R&D as one of the activities supporting a given program. Further, these expenditures are not always specifically identified in the Estimates as being for R&D activities. Some organizations, like the National Research Council, do identify expenditures for research programs and, until this year, the Research Branch in the Department of Agriculture did so as well. Decisions establishing science priorities and resource commitments between and among departments are ultimately a Cabinet responsibility. We audited the management controls over 73 per cent of the funds allocated to R&D as a result of such decisions.

2.5 In our opinion, R&D management controls in departments and agencies to ensure due regard to economy, efficiency and effectiveness were generally satisfactory, although in some organizations we found significant deficiencies. Where we found deficiencies, department managers were working to correct the problems or indicated their intention to do so.

2.6 Published information about R&D expenditures has been inadequate. Information for Parliament on R&D expenditures, prepared annually by the Ministry of State for Science and Technology, omitted significant elements of such expenditures. The Statistics Canada publication on national R&D expenditures did not adequately describe limitations on the use and reliability of the data.

2.7 In our opinion, three organizations audited did not have proper authority to undertake contracts with non-government groups for the paid use of government R&D facilities and services.

Audit Objective and Scope

2.8 The objective of this government-wide audit of R&D was to assess and report on the adequacy of the controls used by management to ensure that R&D was being conducted or fostered throughout government with due regard for economy, efficiency and effectiveness. In doing so, we also developed methodology and criteria for auditing R&D in future departmental comprehensive audits.

2.9 We reviewed management controls in a number of areas, including:

- those for managing R&D in government laboratories, conducted in support of department or agency missions;
- those for managing grants and contributions in support of R&D; and
- those for administering the Treasury Board guidelines, "Science and Technology -- Contracting-out."

2.10 In addition, we reviewed the practices and procedures related to the contracted use of government R&D facilities and services by the public. We also reviewed the reporting of R&D information to Parliament and the public.

2.11 In 1977, we reported on a government-wide audit of the administration of grants and contributions. In the present audit, we reviewed the progress made

in implementing the recommendations made in 1977, in so far as they affected programs in support of R&D.

2.12 We assessed the management controls over R&D against criteria that we consider represent appropriate standards. The criteria are presented in Annexes 1 and 2 to this chapter. When using these criteria to audit the management controls in each of the organizations, we took into account a number of considerations. First, certain aspects of the R&D management process are more important in some organizations than in others. Accordingly, we determined which were most critical in a given organization, and focused our audit on these aspects. Second, we recognized that different types of research call for different types of controls; different organizations can manage in different ways and still demonstrate due regard for economy, efficiency and effectiveness. Thus, all steps in the management process may not always occur in the same sequence in all organizations, and small scale research projects may not need the same formality of control as that required for large scale projects. Furthermore, strengths in one step of the management process may compensate for weaknesses in another.

2.13 We did not assess the technical quality of research carried out or whether the work being done was the most appropriate in terms of meeting an organization's objectives. We assessed the appropriateness of management procedures designed to control research efforts and direct them to productive areas.

2.14 The problems associated with R&D personnel management (for example, lack of human resource planning) are the same as those found elsewhere in the public service and are covered by the payroll costs management segments of departmental comprehensive audits. Accordingly, we did not address these areas in this audit.

2.15 This chapter reports only on those aspects of R&D management that, in our view, are of significance to Parliament. We have discussed details concerning each audited entity with the responsible managers and have made recommendations for correcting identified weaknesses.

2.16 Exhibit 2.1 displays the 1980-81 forecast R&D expenditures of federal departments and agencies and the expenditures within our audit scope. Our audit did not cover all the R&D expenditures in every organization or every organization responsible for R&D.

Summary of Audit Observations

R&D in Government Laboratories

2.17 We found the systems and procedures for managing R&D in government laboratories varied in quality and completeness. In some organizations, the

R&D FORECAST EXPENDITURES IN DEPARTMENTS AND AGENCIES IN 1980-81

Entity	Total R&D Expenditures*	R&D Expenditures Within Scope of Audit
(millions of dollars)		
Agriculture	\$ 149	\$ 141
Communications	62	-
Energy, Mines and Resources	125	91
Environment	68	-
Fisheries and Oceans	58	58
Industry, Trade and Commerce	103	66
National Defence	102	97
Health and Welfare	29	-
Medical Research Council	78	78
National Research Council	192	192
Natural Sciences and Engineering Research Council	145	145
Social Sciences and Humanities Research Council	25	25
Supply and Services	14	-
Transport	16	-
Miscellaneous	45	-
	<u>\$ 1,211</u>	<u>\$ 893</u>

* This tabulation excludes AECL, AECB, CIDA, IDRC, CMHC and NCC with R&D expenditures amounting to \$133.8 million. The source is Federal Science Expenditures and Personnel 1980-81, published by the Ministry of State for Science and Technology.

systems were satisfactory, and any weaknesses were relatively minor. For example, in one organization, the process for selecting R&D projects was satisfactory, although there were no department-wide standards for guiding research establishment managers in selecting R&D projects; each had his own standards. This could lead to inappropriate allocation of funds within department-wide programs. In other organizations, some systems were satisfactory, others were not. Some of the weaknesses were significant. For example, in one organization, planning weaknesses resulted in a failure to communicate clear objectives to the research workers. In others, operational control of projects was weak, resulting in non-productive use of time and unnecessary delays. Where we found weaknesses, managers were working to correct them or indicated their intention to take corrective action.

2.18 Executives responsible for the major R&D operations in government have formed a committee to work with the Office of the Comptroller General in developing guidelines for operational control of R&D projects. We have been informed that they intend to develop guidelines on other aspects of the R&D management process, including planning and project selection. We support these efforts to develop standards of management practice for R&D in government.

Grants and Contributions

2.19 Management systems and procedures for programs involving grants and contributions were generally satisfactory, except for deficiencies in the procedures used to assess program effectiveness in some granting areas. In every case where we identified any weaknesses, management had undertaken corrective action.

2.20 In following up our 1977 recommendations, we found that they had been implemented in so far as they affected grants and contributions in support of R&D.

Administration of Policies Relating to R&D

2.21 **Contracting out.** In our audit, we found that the Treasury Board Secretariat had not monitored the implementation of the 1977 guidelines on contracting out R&D to ensure that departments and agencies, including MOSST, were discharging their assigned responsibilities.

2.22 One stated objective of the contracting-out policy is to achieve "a more even balance between scientific activities" performed by industry and governments. The contracting-out guidelines request departments to submit annual science and technology plans for review by the Treasury Board in consultation with the Ministry of State for Science and Technology. These plans are intended to provide a basis for achieving the "more even balance" by identifying ongoing activities that could be contracted out to the private sector.

In 1978, nine departments submitted plans; only one did in 1979. No science and technology plans were submitted in 1980 or 1981.

2.23 In 1972, when the government's contracting-out policies were announced, the proportion of natural science R&D contracted out to industry was about five per cent. This proportion rose to about 17 per cent by 1977 and has remained relatively unchanged since then. This levelling may be partially explained by resource constraints in the public service since 1978.

2.24 Contracting in. Several departments provide R&D services on a contract basis to the public. The services provided include the use of helicopter test facilities, NRC's large wind tunnel, and the National Defence instrumentation barge for undersea exploration. Our legal counsel advises us that two distinct authorities are required by a department or agency before it can provide and charge for services to the public. First, the responsible minister must have explicit legislative authority to provide specific services to the public. Second, Order in Council authority is required under section 13 of the Financial Administration Act before a department can specify the level of fees or charges.

2.25 Three of the five organizations we audited lacked required authority. The Departments of Energy, Mines and Resources and Fisheries and Oceans had Orders in Council but lacked explicit legislative authority. NRC has clear legislative authority but did not have the required Order in Council to set rates.

Information for Parliament

2.26 Information about federal budgetary expenditures on R&D supplied by the Ministry of State for Science and Technology (MOSST) for consideration with the Main Estimates would be more useful if it included information on the total federal involvement in R&D. In our opinion, the scope of information presented annually in *Federal Science Activities*, commonly called the "Red Book", was too narrow. First, certain classes of R&D expenditures, which represent about \$340 million in federal R&D involvement, were not included in the Red Book. For example, there are income tax reduction programs designed to provide incentives for industry to carry out R&D work. R&D expenditures by commercially oriented Crown corporations, such as Air Canada and Canadian National Railways, were not recorded. Also omitted were administrative costs, including program management and accommodation directly attributable to R&D. Second, forecast R&D expenditures were insufficiently related to intended results or possible benefits; however, MOSST informed us that the original purpose of the Red Book had not required this. We believe it would be appropriate for MOSST and the Office of the Comptroller General to review the purpose, format and content of the Red Book as part of the program to revise the form and content of the Estimates.

2.27 The information on national R&D expenditures in Statistics Canada's *Annual Review of Science Statistics* was inadequately presented. There was no

clear, comprehensive and consolidated statement of the limitations on the reliability and use of the information. For example, one important figure presented in the Annual Review is the GERD -- gross domestic expenditure on R&D in the natural sciences. This is determined by summing the estimated R&D expenditures by the various sectors of the economy. The uncertainty of the estimates is stated only for each sector; there is no indication of the uncertainty when all sectors are summed to give the GERD estimate. Further, the GERD has limitations when used to compare R&D performance of several countries. For example, in the Canadian economy, the non-manufacturing sectors are relatively large; these are traditionally much less R&D intensive than the manufacturing sector. Such comparison limitations are not indicated in the Annual Review.

Background to Government Involvement in R&D

2.28 In recent years, about \$2.5 to \$3 billion has been spent annually in Canada on all types of R&D. The federal government's involvement, both inside and outside its own laboratories, is extensive and varied. The following table displays the total 1979 expenditures on R&D in Canada by sector of performance and source of funds. The table is taken from the 1980 *Annual Review of Science Statistics*.

Research and Development in Canada - 1979

<u>Source of Funds</u>	<u>Sector of Performance</u>				
	<u>Governments</u>	<u>Business Enterprises</u>	<u>Universities</u>	<u>Private Non-profit</u>	<u>Total</u>
	(millions of dollars)				
Governments	\$ 784	\$ 160	\$ 308	\$ 14	\$ 1,266
Business Enterprises	8	886	2		896
Universities			543		543
Private Non-profit			34	9	43
Foreign	<u>1</u>	<u>60</u>	<u>6</u>	<u>—</u>	<u>67</u>
	<u>\$ 793</u>	<u>\$ 1,106</u>	<u>\$ 893</u>	<u>\$ 23</u>	<u>\$ 2,815</u>

R&D in Government Departments

2.29 To give some idea of the breadth and diversity of R&D conducted in government departments, the following examples are extracted from the 1981-82 edition of the Red Book.

2.30 Energy. A recently stated government objective is the attainment of Canadian self-sufficiency in energy, specifically liquid fuels, by 1990. The role of energy-related R&D is to explore alternative means of meeting this objective, such as finding substitutes for oil, using energy more efficiently and developing new energy sources. A panel for co-ordinating government R&D in energy has been set up in the Department of Energy, Mines and Resources. Other organizations carrying out energy-related R&D include the Departments of Agriculture, Environment, Fisheries and Oceans, Public Works, and Transport, and the National Research Council.

2.31 Food. The term "food science" encompasses scientific and technical activities concerned with food production, processing, distribution and retailing. Food science also includes the nutrition, safety and quality of food. The major departments active in this area are Agriculture and Fisheries and Oceans. The Department of National Health and Welfare is active in food-related health protection regulatory activities.

2.32 Natural resources. Mineral, forestry and water resources are included under this category. The Department of Energy, Mines and Resources has the major responsibility for mineral resources. Most of the research is done at the Canada Centre for Mineral and Energy Technology (CANMET) which performs, contracts for and co-ordinates research on mining, extracting and utilizing minerals and metals. The Department of the Environment is responsible for R&D in forestry and water resources, with much of the research directed toward ensuring the long-term supply and quality of these resources.

2.33 Oceans. Canada has a longer coastline than any other country in the world, and oceans-related R&D in this country has been directed toward gaining more scientific knowledge of the oceans and how the marine environment relates to human activities.

2.34 The Department of Fisheries and Oceans spends about half of the funds that the government allocates to all oceans-related R&D. It also contracts out research on the properties and movement of sea ice to determine ways to make it possible for tankers and liquified gas carriers to travel throughout the year to and from the Arctic. The Department of Transport carries out research in this area as well. Planning for the National Research Council's Arctic Vessel and Marine Research Institute is in its final stages. The Departments of Fisheries and Oceans, Communications and Energy, Mines and Resources are collaborating on remote sensing of ocean properties via satellite. Other departments, including National Defence, are also involved in various aspects of oceans R&D. Because so many departments participate, various co-ordinating mechanisms have been established, such as the Panel on Oceans Management, chaired by the Deputy Minister of Fisheries and Oceans.

2.35 Contracting in. The government's contracting-in practice allows private industry to use government facilities and laboratories to do testing and other

development work. An example is the private sector's use of a National Research Council wind tunnel, the largest and most sophisticated in Canada.

R&D in Other Sectors

2.36 Over the years, the Government has made declarations of policy in certain areas involving R&D. One recurring theme has been to increase R&D capacity in the private sector, universities and other organizations. Several methods are used to accomplish this objective, including:

- grants and contributions in direct support of industrial and university R&D;
- contracting-out of science and technology requirements;
- various tax incentives; and
- the use of government procurement to further national R&D objectives.

2.37 **R&D in industry.** The total expenditures on R&D in the business enterprise sector were estimated to be \$1,106 million in 1979. In 1980-81, federal expenditures on industrial R&D were forecast at over \$229 million in two categories of expenditure: contracted research and development (\$100 million) and grants and contributions designed to foster industrial R&D (\$129 million).

2.38 The government's contracting-out policy is designed to increase the amount of R&D performed by private industry and to foster the industrial capacity to carry it out. To encourage contracting out, the government assists departments in financing unsolicited mission-related R&D proposals, if they have scientific merit, are sufficiently unique and contribute to the attainment of a departmental mission. In 1980-81, this fund had about \$15 million available to it.

2.39 The government's largest industrial R&D expenditure is made through grants and contributions programs. For example, in 1980-81, the Enterprise Development and Defence Industry Productivity programs of the Department of Industry, Trade and Commerce contributed almost \$90 million toward fostering industrial R&D. In addition, the National Research Council had authorized expenditures of \$21 million in 1980-81 for its Industrial Research Assistance Program (IRAP).

2.40 A number of income tax incentive programs have been created to foster industrial and other R&D activity. The Department of Finance estimates the annual income tax revenue forgone at approximately \$142 million. In addition, there are remissions of customs duties payable on importing scientific equipment destined for R&D applications.

2.41 Finally, the government is implementing procurement practices of buying Canadian goods and services to achieve certain socio-economic objectives, such as fostering industrial R&D activity in Canada.

2.42 R&D in universities. Universities play an important role in providing trained manpower and in carrying out basic research in Canada. In 1980-81, the federal government gave grants, mostly to universities, amounting to \$256 million in support of R&D. In addition, it spent \$17 million for R&D contracts and \$12 million for scholarships and fellowships. The Medical Research Council, the Social Sciences and Humanities Research Council, and the Natural Sciences and Engineering Research Council distributed most of these funds. Several departments also gave various universities small amounts to support R&D work. For example, in 1980-81, the Department of Agriculture had a grants and contributions program of \$1.3 million to foster agricultural R&D and the development of agricultural scientists.

2.43 R&D in Crown corporations. Expenditures under this category include those made by Crown corporations such as Atomic Energy of Canada Limited (AECL) and Air Canada. The amounts involved are large. For example, AECL had annual R&D expenditures in its own laboratories of \$72 million, and it contracted out a further \$11 million to other agencies. AECL also had contracts from the federal and provincial governments and private enterprise to carry out about \$17 million of R&D work.

2.44 Other R&D funding. The provinces and various non-profit organizations received more than \$84 million from the federal government in 1980-81 for research and development activities. The International Development Research Centre and the Canadian International Development Agency spend about \$40 million each year in support of R&D in developing countries.

The Role of Central Agencies

2.45 The following central agencies have major responsibilities in connection with R&D:

- Ministry of State for Science and Technology;
- Treasury Board, including the Treasury Board Secretariat and the Office of the Comptroller General; and
- Department of Supply and Services.

2.46 MOSST acts as a policy and program adviser to government on science and technology and is also responsible for compiling and publishing information on R&D expenditures in two books. The first, *Federal Science Activities*, (Red Book), is a narrative description of many of the science activities carried out by

government departments and agencies. The Red Book is a major source of information on R&D for Members of Parliament in their consideration of the Estimates. The second publication, *Federal Science Expenditures and Personnel* (Grey Book), is more statistically oriented. Grey Book data can be used to determine whether R&D money is spent on research inside or outside government.

2.47 Statistics Canada publishes national expenditure statistics in the *Annual Review of Science Statistics*. One important figure in the Annual Review is the GERD, which estimates the gross expenditure on R&D in the natural sciences in Canada. The GERD is looked at in relation to the GNP to compare Canada's R&D activities with those of other nations. The government has also designated the GERD as the indicator for a national target of increased expenditure on R&D in the natural sciences.

2.48 The Treasury Board Secretariat is responsible for promulgating administrative policies for R&D. The Office of the Comptroller General carries out functions that are related to those of the Secretariat and is responsible for advising departments and agencies on management controls and on accounting and other systems used to record and control revenues and expenditures.

2.49 The Department of Supply and Services acts as the government's agent for contracting out a large part of R&D work to outside agencies, including the private sector and universities. DSS also acquires the goods and services needed to carry out R&D in government laboratories and is responsible for administering the Unsolicited R&D Proposal program.

The R&D Process and its Management

2.50 A key activity or phase of R&D work is idea-generation -- creative thinking. Idea generation involves linking a perceived need (new knowledge, new or improved processes or products) with the capacity to meet the need through scientific and technical research activities.

2.51 Studies on R&D show that ideas are plentiful; but focusing R&D efforts on those few that are worth examining extensively is critical if research efforts are to be economic and effective. In other words, good research and development concentrates on important problems that can be solved and solves them at reasonable cost. Yet there is a practical difficulty in maintaining this focus: the importance of a problem, whether it can be solved, and how much it will cost cannot always be determined before the research work begins. Although experienced R&D personnel can often intuitively decide a problem's importance and whether a solution is possible, technical, economic and market studies can also be very important. The primary purpose of R&D management procedures is to focus research effort to produce solutions to important problems.

2.52 Five features distinguishing R&D from other processes are set out below and an effective R&D management process would be designed around them. A description of an R&D management process that does this is given in Annex 1.

2.53 Source of ideas and use of outputs. Ideas for sound R&D work can come from many sources, and the results may often be unpredictable. Moreover, unexpected applications for R&D results frequently arise. Managing the interaction between the research worker and the client for research poses a challenge for managers. The client must be kept up to date on what is happening in the laboratory, and the researcher must be kept informed of what output will satisfy the client.

2.54 Risk. In both basic and applied research, there is always the possibility that the suggested approach will not be feasible and the work will lead to a dead end. In development, there is a possibility that the market will not accept the product or that manufacturing costs will be too high. Being aware of such risk is a major challenge for R&D managers. Therefore, good procedures for selecting and reviewing projects are needed to reduce the risks of failure.

2.55 Organization of R&D work. Usually, R&D work is divided into self-contained projects which are often interrelated. The results of one project could serve to identify areas needing further R&D activity. Some projects can continue indefinitely because of the need to maintain scientific expertise in a given area. Therefore, a procedure for managing groups of projects is needed.

2.56 Uncertainty of project duration. The length of time needed to produce research results is often unpredictable and can be quite short or very long. Moreover, the route between research results and successful application can be long, expensive and uncertain. Accordingly, management procedures must provide "controlled flexibility."

2.57 Nature of R&D organizations. A productive R&D organization is built and maintained on the creative capacity, knowledge and skills of scientists, engineers and technologists. A critical function of research managers is to focus the creative energies of research workers. Further, retaining people with these skills requires long-term funding commitments to maintain both the momentum of on-going research and the morale and creativity of the research staff.

R&D in Government Laboratories

Organizations Subject to Audit

2.58 We audited the systems for managing laboratory R&D in the Departments of Agriculture; Energy, Mines and Resources; Fisheries and Oceans; and National Defence; and in the National Research Council. These entities are

responsible for about 75 per cent of federal government expenditures on R&D conducted in government laboratories.

2.59 Agriculture. The objectives of the Research Branch of the Department of Agriculture are to develop new knowledge and improve technology that will ensure the efficient production of an adequate supply of food and agricultural products and assist in maintaining a stable and profitable agricultural industry. Expenditures on R&D in 1980-81 were estimated at \$141 million, with about 3,700 authorized person-years. The Department has its headquarters in Ottawa and operates 47 research establishments and institutes across the country.

2.60 Energy, Mines and Resources. We reviewed two organizations carrying out research in the Department -- the Canada Centre for Minerals and Energy Technology (CANMET) and the Canada Centre for Remote Sensing (CCRS). Research carried out in CANMET relates to energy and mineral resources. The energy-related component principally addresses recovery, processing and effective use of fossil and nuclear energy; mineral research is concerned with resource determination and exploitation. CANMET had 687 authorized person-years in 1980-81 and a budget of \$29.5 million. In CCRS, we audited selected aspects of R&D management. CCRS had a budget of \$13 million and 106 authorized person-years in 1980-81. Its role is to further the development of remote sensing technology and related data analysis systems for use in resource and environmental management. For the sensing, it employs satellites and specially equipped aircraft.

2.61 Fisheries and Oceans. In this Department there is one research program for fisheries and another for oceans. Fisheries research assesses fish stocks and promotes more and better quality fish, fish habitat and nutrition. Oceans research works toward understanding precautions and remedies required to restore and protect the aquatic and marine environment. The total R&D expenditure forecast for 1980-81 was \$58 million. There are 13 research establishments across the country, employing about 1,500 people. The comprehensive audit of the Department is reported in Chapter 8.

2.62 National Defence. The Department of National Defence spends about \$102 million on R&D annually. We reviewed the operations of the Research and Development Branch, which spends \$97 million and employs about 1,700 military and civilian personnel who carry out roughly equal amounts of two kinds of R&D activities associated with:

- acquiring equipment, called technology application; and
- maintaining and developing Canada's capability in defence technology, called technology base.

2.63 The Research Branch is organized with a headquarters in Ottawa and six Defence Research Establishments located in Dartmouth, Valcartier, Ottawa, Toronto, Suffield, and Victoria that are involved largely in the technology base activities; most of the technology application work is contracted out.

2.64 National Research Council. NRC is a departmental Crown corporation with a mandate to undertake, assist or promote scientific and industrial research. In its Research Program, NRC has eight Ottawa-based laboratory divisions and three regional laboratories as well as a number of national research and test facilities. It has a total budget of \$246 million, of which \$192 million is designated as R&D. There are 3,125 employees working in a range of research activities, from work in the Hertzberg Institute of Astrophysics to construction engineering in the Division of Building Research. The comprehensive audit of NRC is reported in Chapter 12.

Audit Criteria and Scope

2.65 The criteria against which we assessed departmental procedures are given in Annex 1. The criteria were developed by this Office and are based on experience in auditing R&D organizations in government, on an extensive review of the literature on managing R&D, and in consultation with experienced R&D managers. They were discussed with, and accepted as valid by, managers of R&D in government laboratories. They were also discussed with the committee of senior executives responsible for major R&D operations in government.

2.66 We identified five steps or aspects of the R&D management process that we considered the most important to successful management of most R&D organizations. This chapter reports on only these five; Annex 1 sets out criteria for the whole process. The five critical aspects are:

- planning, including stating objectives;
- providing for client-researcher interaction;
- selecting projects;
- operational control of projects; and
- evaluation.

2.67 In interpreting our observations, it should be noted that we did not assess the technical quality of the research carried out or whether the work being done was the most appropriate in terms of meeting established objectives. We assessed the appropriateness of management procedures designed to control research efforts and direct them to productive areas.

Observations

2.68 In this section, we report our observations for the five organizations audited. First, we present our observations on each of the critical management aspects of the four departmental R&D organizations. Because of the unique nature of NRC's operations, we have reported our findings on it separately at the end of the section.

2.69 Planning. This aspect of the management process is designed to link the R&D mandate, assessments of needs or opportunities, organizational capacity and resources. It consists of strategic planning, operational planning and project planning. Our criteria call for this process to be formalized in large organizations and appropriately related to other aspects of the management process. In small organizations, the function should be identifiable but may be less formal.

2.70 In the Department of Agriculture, CANMET and CCRS of the Department of Energy Mines and Resources, and the Department of National Defence, we found that the strategic planning process was satisfactory. In the Department of Fisheries and Oceans, a strategic planning process had been under development for about a year, and progress has been satisfactory.

2.71 In our opinion, operational planning was satisfactory in the Departments of Agriculture and National Defence, as well as in CANMET and CCRS of the Department of Energy, Mines and Resources. In the Department of Fisheries and Oceans, an operational planning system was being developed.

2.72 Stating objectives. One purpose of a planning process is to ensure that statements of objectives are clear enough to guide lower levels of management in specifying such things as:

- the clients or users of R&D outputs;
- how to select projects; and
- how to evaluate progress and results.

2.73 We found that this was done satisfactorily in the Departments of Agriculture, Fisheries and Oceans, National Defence and in CANMET and CCRS.

2.74 Client-researcher interaction. The generation of good proposals for scrutiny by the selection process is more likely if an appropriate relationship is established among the client for research service, research managers and the research worker. The appropriate kind of interaction will vary among R&D organizations. Our criteria require that there be provision for appropriate interaction at all stages of the R&D process. This usually requires communication

between the client and the research organization during strategic and operational planning, idea-generation, project selection, and project and program evaluation, as well as during technology or results transfer.

2.75 Procedures for managing client-researcher interaction were well-defined and operating satisfactorily in the Departments of Agriculture, Fisheries and Oceans, and National Defence and in CANMET; we did not review this aspect in CCRS.

2.76 **Selecting projects.** Project selection is the process by which strategic and operational plans are translated into decisions on specific research activities. The selection process should ensure that the projects chosen are those considered most likely to further organizational objectives, given existing organizational capacities. Selection represents approval in principle for a project. Our criteria state that responsibility for operating the selection process should be clearly assigned, and selection criteria and procedures should be documented, where appropriate.

2.77 The process in the Department of Agriculture was generally satisfactory, but there were no departmental guidelines specifying minimum standards for preparing proposals and selecting projects. The Department informed us that it was improving its project management system and that department-wide standards would be developed as part of this work.

2.78 In our opinion, the project selection process was satisfactory in both CANMET and CCRS in the Department of Energy, Mines and Resources.

2.79 In the Department of Fisheries and Oceans, there were satisfactory procedures for controlling the established research programs that form the bulk of the Department's R&D activities. There were, however, no department-wide guidelines or procedures for reviewing or selecting project proposals in new areas of research or for allocating resources to these areas. Mechanisms were not used for ensuring that the various research establishments were selecting such projects on a consistent basis and in a manner that would further the Department's long-term goals as established by senior management.

2.80 The systems and procedures used in the research branch of the Department of National Defence to select and manage both technology application and technology base projects were satisfactory.

2.81 **Operational control of projects.** Operational control is a process of monitoring and taking corrective action to ensure that resources are used economically and efficiently in pursuit of research objectives. It includes:

- preparing a detailed project plan for proposals approved in principle;
- granting final approval based on the detailed plan;
- implementing the plan with appropriate project monitoring; and
- taking corrective action as necessary.

2.82 There should be monitoring of scientific and technical aspects as well as the budget and time schedule. Operational control ensures that research work continues to focus on initially approved goals, but it should also allow the direction of research and development efforts to be altered to respond to scientific discoveries and changing priorities. At the time of this audit, guidelines for operational control were being developed by a committee of senior officials from the public service science community in co-operation with personnel from the Office of the Comptroller General.

2.83 Operational control of projects was generally satisfactory in the Department of Agriculture. In the Department of Fisheries and Oceans, project controls were informal, except for a few of the large and complex projects. We found that departmental requirements did not call for detailed project plans, and several large projects had no such plans. In the Department of National Defence, operational control was generally satisfactory.

2.84 In CANMET, managers had a project control system, but it was inadequate for complete control of their projects. Specifically, project plans were not detailed enough to provide a satisfactory basis for controlling either progress or budget. The Department was developing methods for providing managers with the information they need for monitoring and controlling their project costs. CANMET management stated that this system will be used after it has been tested. In CCRS, operational control of projects was satisfactory.

2.85 **Evaluation.** Traditionally, evaluation in R&D occurs in different ways at a number of stages in the R&D process -- in strategic planning, when a proposal is selected, as research is being carried out, when a project is reviewed for renewal and when a project or program is finished. Under this approach, outside experts are frequently involved, but program managers have the primary responsibility for evaluation. Recently, the Office of the Comptroller General issued the Guide on the Program Evaluation Function which supports the policy that departments will periodically review their programs to evaluate their effectiveness in meeting objectives and the efficiency with which they are being administered. One important feature of the program evaluation function is that it be independent of program management. All the implications for the traditional approach to evaluating R&D that arise from the new policy have not yet been clarified. In our opinion, it would be desirable to develop guidelines specifically for evaluating R&D.

2.86 The Research Branch of the Department of Agriculture has been satisfactorily evaluating its R&D activities in the traditional manner for a number of years. We noted that this work had not been fully co-ordinated with departmental efforts to establish the independent program evaluation function. We have been informed by the Department that steps are under way to co-ordinate the two approaches.

2.87 The Department of Fisheries and Oceans has also been evaluating R&D satisfactorily in the traditional way for a number of years. One feature of its process is an annual review and evaluation of each project by program management. Outside experts often assist management in assessing the scientific merit of the research in these annual reviews. We noted that these evaluation efforts were not yet fully co-ordinated with the departmental program evaluation function.

2.88 The Research Branch of the Department of National Defence was also satisfactorily evaluating its research activities in the traditional way. As we completed our audit, an evaluation assessment of the departmental research function was beginning. This assessment is the first step in conducting a program evaluation and deals with the feasibility of doing such an evaluation.

2.89 The Program Evaluation Branch in the Department of Energy, Mines and Resources has been carrying out evaluations of CANMET research programs at three to five-year intervals. Minerals and Energy research programs were evaluated in 1978 and 1980 respectively. At the time of our audit, the Branch was carrying out an evaluation assessment of CCRS. Except for contracted-out work, there were no formal systems within CANMET for evaluating projects or parts of projects that had been completed. For the contracted-out work, DSS, as the government's contracting agency, requires an evaluation of the contractor and CANMET requires an evaluation of the contract results. Project evaluation systems within CCRS were found to be satisfactory.

2.90 **National Research Council.** The observations set out below should be considered in conjunction with the NRC comprehensive audit report in Chapter 12. NRC is the only audited organization that is not carrying out mission-oriented R&D in support of a department of government. Its role is broader. NRC is also much more heterogeneous than other organizations because of the activities it carries out. About 26 per cent of the budget is spent on a broad range of non-targeted basic research in such widely varying areas as biology and astrophysics; other organizations are usually involved in only one or two areas of targeted basic research. Another 37 per cent is spent on support of Canadian industry, including manufacturing, electronics, construction, mining and so on. Accordingly, NRC's R&D activities, taken as a whole, are more complex than those of other audited organizations.

2.91 In late 1980, NRC produced a five-year corporate plan entitled *The Urgent Investment*. Notwithstanding this recent effort, planning at NRC needed improvement. For example, the statements of objectives at NRC did not appear to have been translated into operational terms, and priorities had not been defined in all units. However, some units, such as the Solar Energy and Computer Technology Research Programs, did have appropriate operational planning. Only some units, for example, the Division of Building Research, managed client-research interaction appropriately. NRC had a satisfactory procedure for selecting projects for which new or additional resource commitments were required; however, in research areas to which resources had been committed in previous years, the method that some units were using for selecting projects was inadequate. Only some units had satisfactory operational control over projects. NRC has assessed program effectiveness in basic research using a peer review of individual research efforts. However, many units, in our judgement, did not have adequate procedures for assessing program effectiveness in the area of applied research.

2.92 During our audit, we noted that managers at NRC were addressing many of the weaknesses in procedures. These activities are described in Chapter 12.

Grants and Contributions in Support of R&D

Introduction

2.93 A recurring theme of government policy has been to increase the R&D capacity of universities and industry. One approach is to make payments to individuals and institutions in these sectors. Many programs have therefore been set up to administer grants and contributions to do this. An R&D grant is a payment made for a specified purpose but without an audit requirement. A contribution is a payment made for a specific purpose but subject to audit to ensure that funds have been used in accordance with contribution arrangements arrived at between the government and recipient.

Organizations Subject to Audit

2.94 We examined the management controls over approximately \$275 million in grants programs aimed largely at supporting university research. These programs are administered by three granting councils, the Medical Research Council, the Social Sciences and Humanities Research Council, and the Natural Sciences and Engineering Research Council. We also audited two National Research Council programs that contributed approximately \$22 million in 1980-81 to support industrial research and development.

2.95 We reviewed the internal audit of the grants and contributions programs in the Department of Energy, Mines and Resources. In 1980-81, expenditures for R&D projects under these programs were estimated at \$48 million. In the Department of Industry, Trade and Commerce, we reviewed an internal audit

that the Department was conducting of its Enterprise Development Program. Expenditures under this contribution program were authorized at \$66 million.

2.96 We estimate that the programs we audited and those covered by departmental auditors account for about three-quarters of all federal expenditures on grants and contributions in support of research and development.

2.97 Medical Research Council. The objective of this Council is to help attain the quality and scale of research in the health sciences essential to maintaining and improving health services. In 1980-81, the Council's authorized expenditures in the Main Estimates for its Grants and Scholarship Program were \$78 million, with a total of 39 authorized person-years to administer the Program. The Council provides grants in the health sciences to help meet operating and equipment requirements for research projects and to provide direct support for investigators and research trainees. Grants are made to help carry out research on topics of national concern as well as to promote research and the provision of research facilities in regions in Canada where these have not been adequately developed. Scientific merit as judged by a peer review process is the major criterion on which approval of such grants is based. Grants also support symposia and international scientific activities and exchange programs.

2.98 Social Sciences and Humanities Research Council. This Council began operation on 1 April 1978, taking over programs previously administered by the Humanities and Social Sciences Division of the Canada Council. The objective of the Council is to promote and assist research and scholarship in the social sciences and humanities. The Council operates over 60 granting programs, with most funds awarded on the basis of excellence as established by peer assessment. The programs provide fellowships for research training and grants supporting independent research, international scholarly exchanges, research resources, publishing and conferences. In 1980-81 the Grants and Scholarships Program budget provided 105 authorized person-years and \$38 million, \$25 million of which was for R&D.

2.99 Natural Sciences and Engineering Research Council. This Council took over the Grants and Scholarships program of the National Research Council in 1978. Its objective is to promote and support research in the natural sciences and engineering and to ensure a supply of highly qualified people in these areas. In 1980-81, the Council was authorized to have 75 person-years and expenditures of \$163 million. Almost 98 per cent, or \$159 million, was paid out to university researchers and students in the form of research grants and scholarships. Of this amount, \$145 million was designated for R&D. The Council operates about 30 different granting programs, with most funds awarded on the basis of excellence of the proposed research or of the researcher. The merit is judged by specialists in the same area from university, industry and government.

2.100 National Research Council. NRC has two contributions programs that directly support industrial innovation and development. In 1980-81, the Industrial Research Assistance Program (IRAP) had expenditures of \$21 million; the Science and Engineering Student Program (SESP) had expenditures of \$1 million. IRAP partially funds industrial R&D projects conducted by industry. SESP funds the hiring by small firms of students to work on development projects.

Audit Criteria and Scope

2.101 The audit criteria against which we assessed the management procedures in the grants and contributions programs are given in Annex 2. These criteria were developed by this Office and are based on previous experience in auditing grants and contribution programs. They were discussed and agreed with program managers during the audits.

2.102 Our audit addressed what we consider to be the four most important aspects of the management of grants and contributions programs:

- stating objectives;
- reviewing and approving applications;
- monitoring funded proposals; and
- assessing program effectiveness.

Observations

2.103 The management systems and procedures were generally satisfactory in all the programs audited. In particular, the systems in place for planning grants and contributions programs, choosing research proposals for funding, and monitoring approved proposals were satisfactory. However, in a number of the program areas, procedures for assessing effectiveness were either unsatisfactory or absent.

2.104 Stating objectives. Departments and agencies have considerable latitude in interpreting their legislated mandates as they apply to supporting research and development, whether the R&D activity occurs in the university or the industrial sector. This latitude extends to establishing both the target groups for support and the guidelines covering who is eligible for funding.

2.105 We observed that management had translated the broad statements of roles or program objectives into terms specific enough to provide direction to those managing grants and contributions programs.

2.106 Reviewing and approving applications. Developing procedures for reviewing applications and approving those that will result in the best proposals being chosen for financial support is critical to managing grants and contributions. In our view, program managers had taken care to ensure that this function was carried out properly. Although we found some instances of weak administrative procedures supporting the decision-making process, these were not significant, and the organizations involved were taking steps to improve them.

2.107 Monitoring funded proposals. Systems for monitoring grants and contributions after they had been disbursed varied in quality. For grants administered by the granting councils, systems for monitoring the progress of funded proposals and expenditures went beyond central agency requirements. Even though grants are not subject to audit, program managers had developed procedures that generally allowed them to monitor funded proposals and determine whether recipients were using funds for intended purposes. These procedures were particularly effective in the cases of multi-year grants which have to be reviewed annually.

2.108 In the case of contributions, appropriate procedures for monitoring approved proposals were in place, but were not always followed.

2.109 Assessing program effectiveness. The most general weakness that we found was in the assessment of program results achieved through grants and contributions programs. Either little attempt had been made to measure program results, or the measurement methods used were deficient.

2.110 The Social Sciences and Humanities Research Council had satisfactory procedures for assessing program effectiveness.

2.111 The Medical Research Council and the Natural Sciences and Engineering Research Council did not attempt systematically to assess the effectiveness of their various programs, but both Councils had measured the effects of some programs. It is important to recognize that the absence of systematic assessment procedures does not mean that managers were unconcerned with issues of program effectiveness. However, in our opinion, both these Councils needed to conduct assessments designed to determine those aspects of their programs for which cost-justified and satisfactory effectiveness measurements could be made.

2.112 The National Research Council has attempted to assess the economic benefits resulting from the IRAP and SESP contributions programs. However, our examination revealed a number of deficiencies in evaluation methodology. For a discussion of these, see Chapter 12.

Reliance on Other Auditors

2.113 In the Department of Industry, Trade and Commerce, an internal audit of the Enterprise Development Program was under way at the time of our audit. We shall monitor developments resulting from this work as part of the comprehensive audit of the Department.

2.114 During our audit, the internal audit group of the Department of Energy, Mines and Resources was starting to examine the grants and contributions made in 1979-80, excluding those made under the Oil Import Compensation Program. Their audit did not include new programs launched since that year. We reviewed the terms of reference, the internal audit plans and criteria and suggested some changes that were accepted. When the audit had been completed, we reviewed the working papers and reports and concluded that the findings of the internal audit were appropriate. They indicated that management and financial control over the grants and contributions covered by the audit were generally satisfactory. The internal audit team noted some minor deficiencies and recommended corrective action.

2.115 In this case, we relied on the findings of the internal audit group without further audit work on our part.

Follow-up of Previous Audit Work

2.116 We restricted our follow-up of the government-wide issues raised in our 1977 grants and contributions audit to those that apply to R&D. Our review indicated that central agency directives and guidelines issued since our 1977 audit had adequately addressed the matters raised, and the organizations that we audited were generally complying with them.

Administrative Processes Relating to R&D

2.117 The Treasury Board and the Ministry of State for Science and Technology are responsible for the policy, "Science and Technology -- Contracting Out" and for collecting and presenting R&D information. In addition, the Treasury Board and several departments have joint responsibility for administering the contracting-in practices.

Contracting Out

2.118 In 1972, the Government announced a "make or buy" policy for R&D. At that time, the proportion of R&D activity contracted out to Canadian industry was about five per cent. Departments were expected to make an explicit decision whether to "make or buy" in meeting any new natural science R&D requirements. The immediate purpose of the policy was to increase the proportion of mission-related R&D work done by Canadian industry. The resulting increase in industrial

R&D capability was expected to improve the innovative capacity of the private sector.

2.119 The policy was strengthened in 1974 with the "Unsolicited Proposal" program designed to encourage industry-initiated, mission-related R&D. A fund was set up to help departments finance those unsolicited proposals that appeared likely to contribute to the economic attainment of a departmental mission.

2.120 In 1975, a major review of the make or buy policy was conducted by MOSST, and policy changes were introduced over the next two years. These culminated in the Treasury Board guidelines, "Science and Technology -- Contracting Out" that took effect from 1 April 1977. By this time, the proportion of R&D activities contracted out had grown to about 17 per cent. Our review of R&D information published by MOSST indicated that there has been no significant change in this figure since 1977. This levelling may be partially explained by the resource constraints in the public service since 1978.

2.121 The new guidelines increased the scope of the policy in two major ways. First, related scientific activities and R&D in some fields of human science were to be contracted out, in addition to R&D in the natural sciences. Second, all science and technology activities were to be considered eligible for contracting out, not just new activities. Included in the guidelines were criteria to be used in judging whether an existing science and technology activity was to be retained in-house or contracted out.

2.122 One stated objective of the 1977 guidelines was to increase the share of mission-oriented science and technology activities carried out in the private sector. Specifically, the objective was "to achieve a more even balance between scientific activities carried out by industry and governments."

2.123 **Audit scope.** We reviewed the administration of the 1977 guidelines on contracting out in the Departments of Agriculture; Energy, Mines and Resources; Fisheries and Oceans; National Defence; and the National Research Council. We also reviewed the roles of the Treasury Board Secretariat and the Ministry of State for Science and Technology in implementing and monitoring the contracting-out policy and the mechanisms for updating and revising the policy and related guidelines. In addition, we reviewed the DSS Science Centre which is responsible for various aspects of contract administration.

2.124 The standards against which we assessed the administration of the policy are contained in the Treasury Board Guidelines on Contracting-out. As an example, the guidelines state that "each department is responsible for ensuring that the contracting-out policy is implemented as effectively as possible...". MOSST "is responsible for reporting to Cabinet on the implementation of the policy, the evaluation thereof, and recommendations for changes therein." The

first evaluation was to begin in May 1979. Further, MOSST "will report annually to the Treasury Board the effects of contracting-out policy on the distribution of activity between government and industry, and on intramural research and development competence and manpower."

2.125 In addition, we included a general criterion that central agencies that issue policies and guidelines should monitor their implementation. In general, they should also evaluate their effects and revise such policies and guidelines, as necessary. Even in cases like contracting out where these latter responsibilities are delegated, the Treasury Board, in our view, retains a responsibility to monitor to ensure that these delegated responsibilities are carried out. The Treasury Board Secretariat needs to have an appropriate process for doing this, although departmental internal audit groups are responsible for assessing compliance with policy directives.

2.126 Observations. The contracting-out procedures used in the DSS Science Centre were satisfactory, and the organizations we audited complied with the guidelines to a limited extent. The contracting-out policy guidelines call for departments to submit science and technology plans annually as part of the budgetary process. In 1978, nine departments submitted plans but, in 1979, only one did. No science and technology plans have been submitted since, and there have been no further requests for them. In 1979, MOSST reported to Treasury Board Secretariat that departmental science and technology plans had been "inadequate" and that, in their plans, departments had not provided fully for contracting out. MOSST made several proposals to encourage departments to follow the contracting-out policy but, although some negotiations took place among MOSST, Treasury Board Secretariat and the departments, no further action resulted. This inaction could be partially attributed to changes in the budgeting process with the introduction of the expenditure management system in 1979. MOSST did not make the annual reports on the effects of the policy to the Treasury Board. However, it should be noted that the absence of departmental science and technology plans undermined the basis of such reports. An evaluation of the policy was begun in September 1980 although planning for it had begun much earlier. In March 1981, the Treasury Board Secretariat followed up by asking MOSST for the status of the annual reports and of the evaluation. A draft evaluation was given to the Treasury Board Secretariat.

2.127 *MOSST and Treasury Board Secretariat should review the contracting-out policy and guidelines and make revisions as needed.*

Contracting In

2.128 Contracting in is the process whereby outside organizations gain access to government R&D services and laboratory facilities. The operating departments establish and collect fees for providing such services. The annual revenue generated amounts to about \$10 million.

2.129 In the early 1970s, Treasury Board recommended to the Administrator in Council that the ministers of several departments be authorized to prescribe the fees to be paid for scientific services provided by the departments to the public. Departments interpreted the related Orders in Council as the required authority to provide and charge for services.

2.130 Our legal counsel advises us that two distinct authorities are required by a department or agency before it can charge for services it provides to the public. First, the responsible minister must have explicit authority to provide specific services to the public. One purpose of this requirement could be to ensure that departments do not engage in unauthorized competition with the private sector. Second, Order in Council authority is required under section 13 of the Financial Administration Act before a department can specify the level of fees or charges. One purpose of this is to ensure that unauthorized subsidies are not provided to individuals or groups. Chapter 10 of the Guide on Financial Administration sets out the policy and guidelines to be followed by the Treasury Board Secretariat and departments in establishing rate structures for contracting in.

2.131 **Audit scope.** We reviewed the contracting-in process in the Departments of Agriculture; Energy, Mines and Resources; Fisheries and Oceans; National Defence; and the National Research Council to determine whether proper authority had been obtained and whether contracting in was being conducted with due regard for economy, efficiency and effectiveness. We also reviewed the role of Treasury Board Secretariat in the contracting-in process.

2.132 **Observations.** In our opinion, three of the five organizations we audited did not have proper authority to charge for services. The Department of Agriculture informed us that it does not contract in. The Department of National Defence had the required legislative authority in Vote 1 of its appropriation act.

2.133 The Department of Fisheries and Oceans has legislation enabling it to carry out many activities related to fisheries, recreational harbours, hydrography and marine services. This legislation enables the Department to establish research facilities, conduct research and provide for the use of some of these facilities by non-government groups. However, the Department had provided some facilities and charged for their use without explicit legislative authority, although it had Order in Council authority to set rates. The control over some of the revenues thus generated is discussed in Chapter 8, paragraph 8.157 of this Report.

2.134 The Department of Energy, Mines and Resources has explicit legislative authority to sell publications, maps and other documents issued by the Department. However, it did not have explicit legislative authority to provide R&D services to the public, although Order in Council authority to set rates for such services had been obtained.

2.135 The National Research Council has clear legislative authority to charge for any R&D services to the public, but it had not obtained Order in Council authority to set rates. In September 1981, we were informed by NRC that steps were being taken to obtain the required Order in Council.

2.136 In our review of administrative procedures for contracting in, we found that some organizational units provided research facilities free rather than go through the legislative and administrative difficulties of seeking authority and then setting and collecting fees. In others, because of internal administrative delays, non-government groups were unable to contract for the timely use of research facilities. In some cases, the moneys received and dispersed were not clearly disclosed in the Estimates and Public Accounts.

2.137 *The Treasury Board should ensure that the problem of departmental authority for contracting in is resolved.*

2.138 *Departments should speed up their administrative procedures to facilitate contracting in.*

Information for Parliament

Introduction

2.139 We examined the quality of R&D information that the Ministry of State for Science and Technology and the other organizations we audited supply to the House of Commons. As a supplement to the Main Estimates, MOSST collects, analyses and reports information on science expenditures in *Federal Science Activities* (Red Book). Statistics Canada publishes the *Annual Review of Science Statistics*, a compilation of national expenditure statistics on Research and Development. The Annual Review includes the widely used science statistic, the GERD, referred to previously. We assessed controls over the preparation and presentation of this information.

Observations

2.140 **Federal expenditures.** The Red Book is provided as a source of budgetary information on R&D for Members of Parliament. Its usefulness could be increased by expanding the scope to include information about other federal involvement in R&D. For example, the Red Book does not mention the cost and purposes of tax expenditures or duty remissions related to R&D; the Department of Finance estimates the annual income tax forgone at about \$142 million. A number of significant elements, such as the expenditures on R&D by some commercially-oriented Crown corporations, estimated at about \$ 95 million, are not included. Also omitted are overhead costs such as accommodation, services provided by other departments, including ships and aircraft, and portions of administrative costs attributable to R&D activities, estimated by Statistics

Canada to be about \$50 million. Recoupment costs, which are payments made by the federal government to cover a portion of a firm's R&D expenditures, are not reported. These costs may take the form of a payment, identified as being for R&D, on capital item procurements, such as aircraft or military ships. They may also be bonuses added to R&D contracts to encourage a firm to do its own R&D work or to reimburse a firm for hiring additional R&D staff. For 1981-82, recoupment costs are estimated to be over \$50 million. These omissions result in federal involvement in R&D being understated by about \$340 million. Because of compensating factors, these omissions do not significantly influence the estimate of the GERD.

2.141 In addition, the usefulness of the information in the Red Book would be improved by relating forecast science expenditures to intended results and possible benefits and by ensuring that it is available when Members of Parliament begin to review the Main Estimates.

2.142 Any improvements should be undertaken in concert with the government program to revise the form of the Estimates. This program of revision is being co-ordinated by the Office of the Comptroller General.

2.143 We observed deficiencies in quality control over the data collection process. For instance, lack of preciseness in the definitions of different kinds of science activities can lead to different interpretations of what constitutes an R&D expenditure; this leads to inconsistencies. In the five organizations audited, we found under-reporting of R&D spending by at least \$20 million, out of a total of about \$540 million. Some organizations reported procurement contracts for goods and services associated with R&D in government laboratories as expenditures supporting R&D in other sectors of the economy.

2.144 MOSST has informed us that it has begun a review of the purpose, scope and content of the Red Book, as well as the controls over data quality.

2.145 **National expenditures.** The information on national R&D expenditures in the Statistics Canada publication, *Annual Review of Science Statistics*, was inadequately presented. As noted earlier in this chapter, limitations on the reliability and use of the information are not described clearly, comprehensively or in a consolidated form.

2.146 Statistics Canada calculates the GERD figure by summing the estimated expenditures on R&D by the various sectors of the economy. The uncertainty in the estimates is stated only for each sector; there is no indication of the uncertainty when the estimates for each sector are summed to give the GERD estimate. The uncertainties represent large amounts of money and, since they are not expressed in dollar terms and consolidated, their significance could escape the reader. We consider that the range of uncertainty for estimates of the

GERD is about plus or minus \$200 million out of total expenditures of \$2.5 billion. It should be noted that this represents an uncertainty range of plus or minus 8 per cent; a range that is not abnormal for this type of statistic.

2.147 In addition to the reliability problem, there are issues of usefulness and comparability. To make comparisons among its members, the Organization for Economic Co-operation and Development (OECD) computes a Canadian GERD using data supplied by Statistics Canada. The OECD-calculated GERD includes expenditures on R&D in both the natural sciences and the humanities and social sciences. The Canadian GERD includes expenditures on R&D in the natural sciences only. Statistics Canada informed us that the narrow basis of calculation had been chosen as the most appropriate for the Canadian situation. The excluded Canadian humanities and social sciences component amounts to about \$315 million. Both statistics appear in the Annual Review, and there is a risk of erroneous comparison because the differences are not clearly indicated.

2.148 Although Statistics Canada cannot be held responsible for misuses of statistics it presents, it should, in its publications, warn readers of possible limitations to the use of these data. It is well known that the GERD is used as a comparative indicator of Canadian performance in R&D and, in this regard, it has significant limitations. For example, the Canadian economy depends heavily on its non-manufacturing sectors. These sectors are traditionally much less R&D intensive than the manufacturing sector. Therefore, the Review should indicate that the GERD/GNP ratio can be used only with caution when comparing Canada to other countries.

2.149 The 1980 edition of the Annual Review was published while our audit was in progress. Among the improvements in that edition were the inclusion of data and discussions on a number of indicators of science and technology performance and a table displaying the total expenditure on R&D in Canada. We encourage continued efforts to develop a broad range of science activity indicators.

2.150 Our audit also revealed that Statistics Canada had identified and was working toward resolving significant reporting problems. However, quality control procedures over R&D expenditure data collection were often informal and undocumented. Management informed us of its intention to review the collection and presentation of the national expenditure information on R&D.

2.151 *As part of the Treasury Board's program to revise the form and content of the Estimates, the Ministry of State for Science and Technology, with the Office of the Comptroller General, should review the reporting of R&D information to Parliament.*

2.152 *Statistics Canada should improve the presentation of the data in its Annual Review of Science Statistics. In particular, it should clearly describe significant limitations on reliability and use of publicly reported data.*

2.153 *Both the Ministry of State for Science and Technology and Statistics Canada should improve their controls over the quality of information on R&D for public use.*

ANNEX 1

Audit Criteria for the Management of Research and Development in Government Laboratories

The audit criteria presented here are summary statements of more detailed criteria used in our audits and represent standards that we consider appropriate for R&D generally. The key audit question was whether appropriate management controls for the specific circumstance were in place and working.

We took into account a number of considerations when using these criteria. First, certain aspects of the R&D management process are more important in some organizations than in others. Accordingly, we determined which were most critical in each organization and concentrated our work on these aspects. Second, different areas of research call for different types of controls; different organizations can manage in different ways and still demonstrate due regard for economy, efficiency and effectiveness. The steps in the management process, therefore, may not always occur in the same sequence in all organizations and small projects may not need the formality of control required for large projects. Furthermore, strengths in one step of the management process may compensate for weaknesses in another.

The structure of the audit criteria for the control of R&D activities in government laboratories is based on a general management process as outlined in Diagram 2.1. The reader should bear in mind that there is considerable feedback and interaction among the several functions shown in the diagram -- the typical R&D management process generates much greater exchange of information than the model might suggest.

Planning

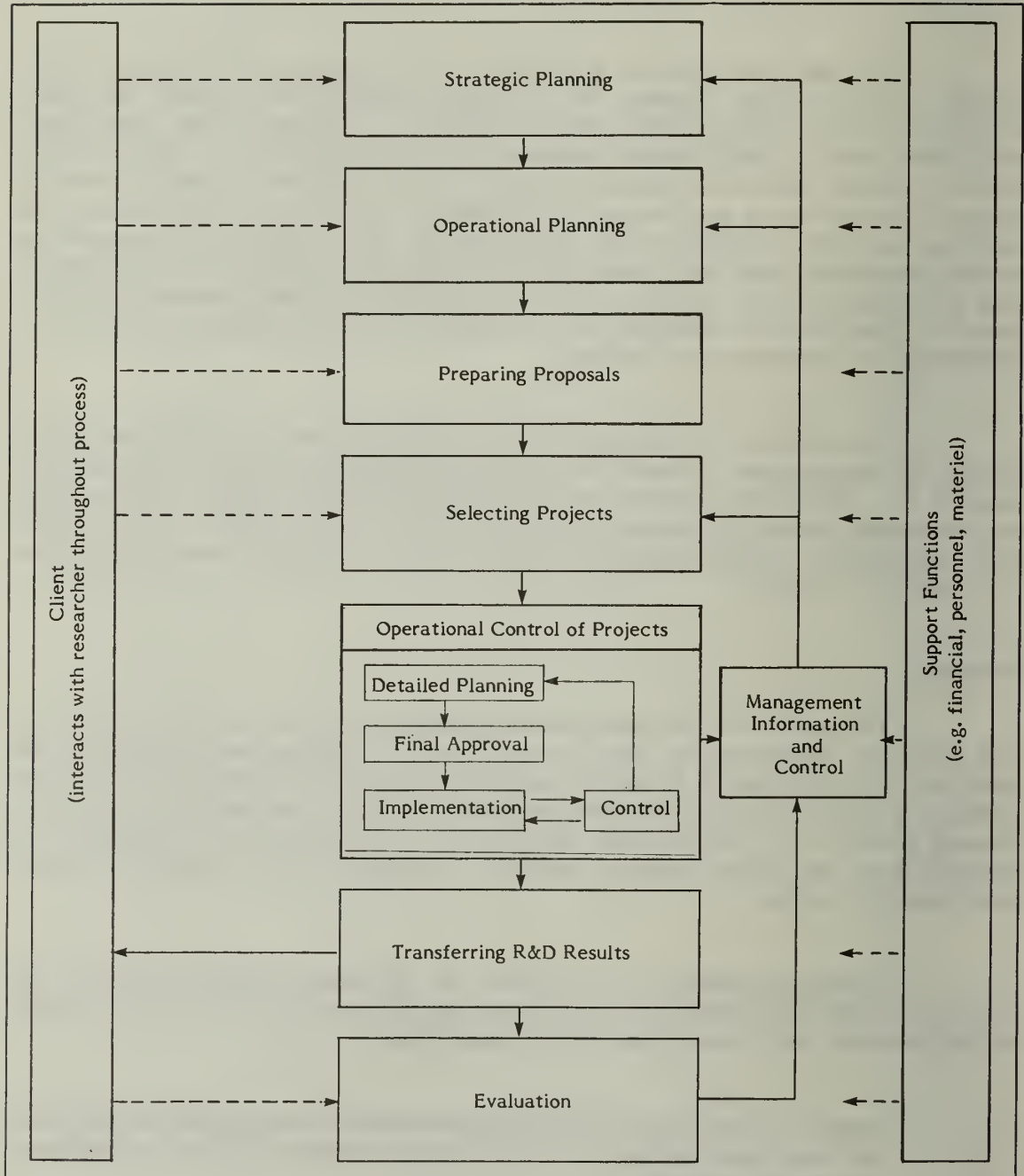
This aspect of the management process is designed to link together the R&D mandate, assessments of needs or opportunities, organizational capacity, and resources. It consists of strategic planning, operational planning and project planning, the latter two being successively more specific. One major purpose of a planning process is to ensure that statements of objectives are translated into sub-objectives that direct research efforts to approved areas and provide adequate guides to action.

Strategic Planning. This level of planning defines the role and objectives of the R&D function and should result in identification of the clients for R&D services and types of service to be provided.

Strategic objectives for R&D should reflect the legislative mandate of the department or agency and be stated clearly enough to be guides to operational planning.

Diagram 2.1

MANAGEMENT PROCESS FOR R&D IN GOVERNMENT LABORATORIES



Statements of strategic objectives should:

- reflect the longer-term perceived needs and opportunities for R&D;
- indicate the type of clients to be served and the type of R&D services to be provided; and
- reflect assessments of the technical feasibility of the R&D work and the organizational capacities to do R&D.

Estimates of the needed resources should be set out for each R&D objective.

Responsibility for strategic planning should be clearly assigned.

Operational Planning. Whereas strategic planning provides a basis for policy approval, operational planning provides the basis for committing resources to specific short, medium or long-term goals. An operational plan can take the form of a portfolio of resources allocated to particular research areas and clients and, in many research organizations, operational planning includes the selection of specific R&D projects and programs within the resources allocated to each area.

Objectives set by operational planning should be clear enough to guide R&D managers in specifying the R&D clients, selecting projects and evaluating progress.

Operational plans for R&D should specify:

- the R&D needs to be met;
- who will prepare proposals;
- what resources are available for each research area;
- the program or project duration; and
- the procedures for monitoring and controlling against plan.

Operational plans should be appropriately documented.

Responsibility for operational planning should be clearly assigned.

Providing for Client-researcher Interaction

R&D management should provide for appropriate client-researcher interaction at all stages of the R&D process -- strategic and operational planning, generation of ideas, preparation of proposals and their selection, transfer of R&D results and evaluation.

Preparing Proposals

Management should provide guidelines for the preparation of proposals.

Proposals should be appropriately documented.

Where appropriate, project proposals should:

- indicate how the project will help meet the objectives of the department or agency;
- identify the client for the project;
- state expected results and outputs and, wherever appropriate, assess the estimated costs and the chance of success against estimated pay-off;
- explain and justify the proposed research approach and the specific scientific and technological methodology to be used and, where applicable, name any outside participants;
- indicate how the project will be controlled and progress assessed;
- include a project budget, giving cost estimates of major items;
- state the mix of personnel and qualifications required to carry out the work and how these resources are to be obtained;
- state the research facilities and support services required, and when and for how long they will be needed; and
- state to whom the results of the project will be reported and how.

Selecting Projects

This is the process through which strategic and operational plans are translated into decisions on specific research projects. Selection of a proposal for

a project or program represents its approval in principle. Frequently outside experts and the client for the research service are involved in the review process.

Proposals should be formally reviewed and approved or rejected using criteria developed by management.

The criteria and decisions should be appropriately documented.

Responsibility for the selection process should be clearly assigned.

Operational Control of Projects

Operational control is the process designed to ensure economic and efficient performance of the research work. It includes the development of a detailed project plan, the granting of final approval based on this detailed plan, implementing the plan, and monitoring progress and taking corrective action. Final approval can be delegated to the appropriate level so long as the project objectives and resource commitments in the detailed plan are consistent with the proposal approved in principle.

In September 1981, we received from the committee of senior executives of the science community draft guidelines entitled "Operational Control of Research and Development in Departments and Agencies of the Federal Government of Canada." Future audits will be conducted with reference to these guidelines.

Detailed project planning. After a proposal has been selected, project planning should be carried out at a level of detail appropriate to the project.

Management should provide guidelines for preparing detailed project plans.

Project plans should be appropriately documented.

Where appropriate, project plans should:

- state project objectives clearly enough to guide research work;
- describe the proposed R&D methodology;
- specify activities and tasks to be performed and assign responsibility for them;

- list resource requirements, particularly for shared facilities, and provide a schedule for their use;
- describe project organization, including delegation of authority;
- define the project monitoring procedures, including qualitative and quantitative indicators, for assessing progress and use of resources; and
- identify decision points for continuation or termination.

Final approval. The approval of the detailed plan represents final authority to begin the research work. In most cases where the duration of the project falls within normal financial commitment periods, approval to begin would constitute approval for the whole project. However, where the project is expected to continue for an extended period, or if completion depends on a critical success point, approval to begin should not represent "final" approval for the entire project.

Authority and criteria for final approval of projects should be clearly defined.

Implementation and operational control of projects. Implementation is the term describing actual laboratory or development work. Project control involves monitoring technical progress and expenditures and taking appropriate corrective action when deviations from plan are detected. Control procedures should be appropriate for the project. In particular, some control procedures may be informal for smaller projects.

Responsibility and authority for project management should be clearly assigned.

Operations should be conducted with due regard for economy, efficiency and effectiveness and for the safety and security of research workers and the public.

There should be accurate, relevant and timely information that indicates to management the actual status of each project.

Major deviations from an approved project plan should be analysed and appropriate action taken.

The appropriate level of management should review, approve and document significant changes to project plans; for example, redefinition of objectives, increase of resource needs, extending schedule or terminating.

Transferring R&D Results

Throughout the R&D process, particularly at the proposal preparation and selection stages, consideration should be given to the transfer of research results to users.

Managers should develop specific means to facilitate use of research results.

Procedures should exist for ensuring, that, where appropriate, scientific results are published and, whenever appropriate, discoveries and developments are patented and the patents licensed.

Evaluation

Traditionally, evaluation in R&D occurs in different ways at a number of stages in the R&D process -- in strategic planning, when a proposal is selected, as research is being carried out, when a project is reviewed for renewal and when a project or program is finished. Outside experts are frequently involved. The Office of the Comptroller General has issued the Guide on the Program Evaluation Function which supports the policy that departments will provide independent, periodic review of their programs to evaluate their effectiveness in meeting their objectives and the efficiency with which they are being administered. All the implications for the traditional approach to evaluating R&D that arise from this policy have not yet been clarified. In our opinion, it would be desirable to develop guidelines specifically for evaluating R&D.

The evaluation of R&D programs should meet standards appropriate for R&D.

Management Information and Control

An appropriate management information system is required for overall control of R&D programs and projects. Informal systems are often suitable for one or two-man projects. However, for controlling larger projects and for comparing actual results with operational and strategic plans, a formal information system is required. The information will be a mixture of quantitative data and narrative description.

There should be a system for providing managers with reliable, relevant and timely information on program and project resource consumption and progress against strategic and operational plans.

Support Systems

To the extent possible, R&D support systems, such as finance and administration, internal audit and materiel should be designed for R&D.

ANNEX 2

Audit Criteria for the Management of R&D Grants and Contributions Programs

A number of processes are common to the management of R&D grants and contributions in all departments and agencies. For each of these processes, we developed audit criteria, which can be regarded as statements of what constitutes good practice in management control of grants and contributions. The emphasis or applicability of specific criteria may, of course, vary depending upon the nature of a program.

We have listed our criteria according to the eight management processes as shown in Diagram 2.2.

Stating Objectives

The objectives of R&D grants and contributions programs should be defined and translated into operational terms that will be clear enough to:

- specify the group(s) eligible for funding;
- indicate appropriate guidelines for reviewing and approving applications; and
- identify measures for determining the effectiveness of the programs.

Establishing Terms and Conditions

Terms and conditions translate legislative intent into operational terms that must be approved by the Treasury Board. This approval provides a control over purposes and recipient eligibility.

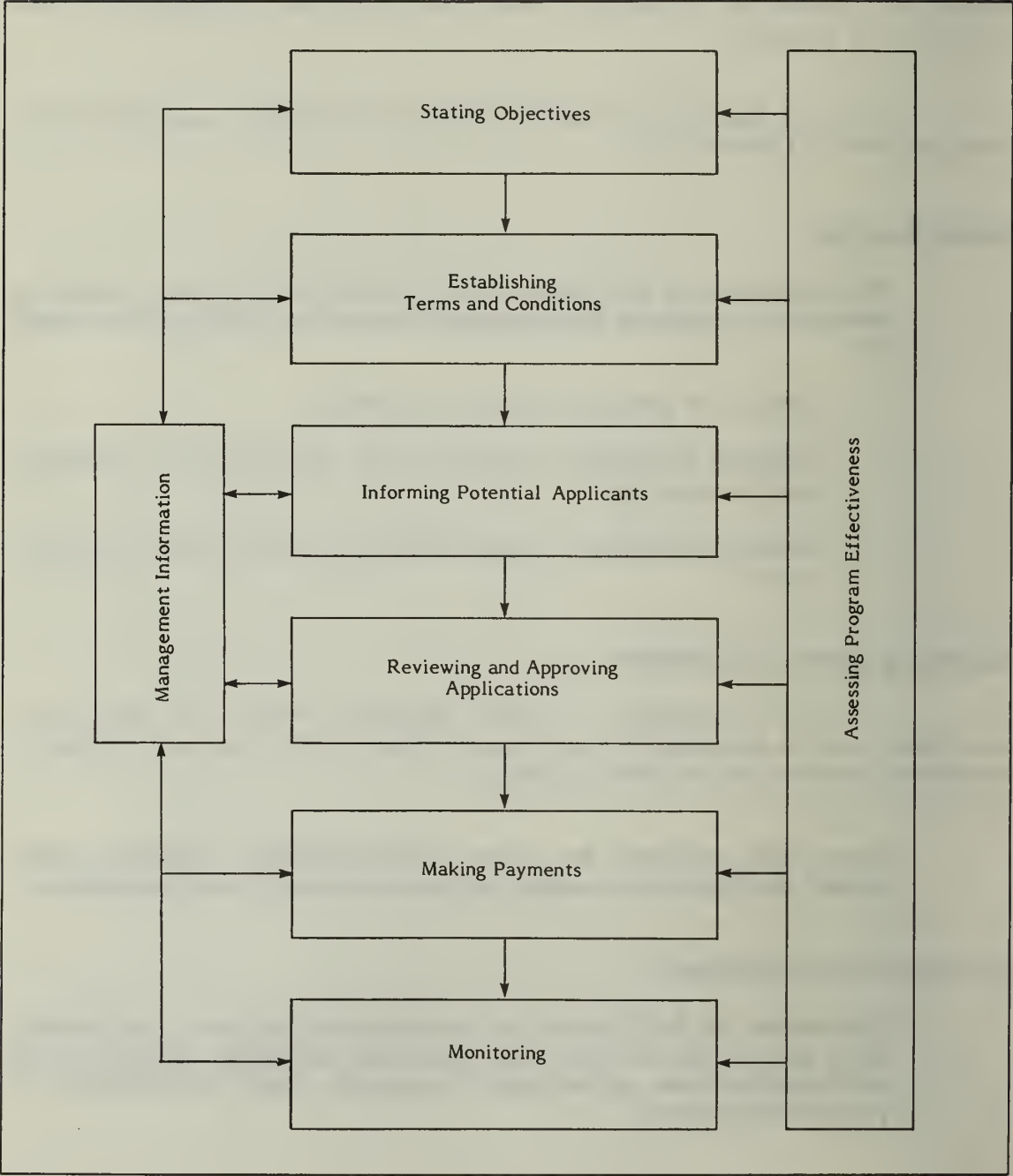
Terms and conditions for grants and contributions programs should reflect the legislative mandate and requirements of central agencies.

Informing Potential Applicants

Information on R&D grants and contributions programs, and particularly information on the rules governing eligibility, guidelines for applicants and the preparation of proposals, should be distributed to potential applicants.

Diagram 2.2

MANAGEMENT PROCESS FOR R&D GRANTS AND CONTRIBUTIONS



Reviewing and Approving Applications

Procedures should be established for ensuring that the applications approved are those most likely to achieve program objectives. These procedures should be documented.

- Applications should be assessed against documented selection criteria.
- Decisions should be adequately documented.
- The review procedures should require applicants to disclose all other sources of funding for a particular proposal.
- Any delegation of authority for the approval or extension of a grant or contribution should be accompanied by appropriate controls.

Making Payments

Grants and contributions payments should be consistent with the approved level of funding.

- Applicants should indicate in writing their acceptance of all conditions attached to a grant or contribution before funds are disbursed.
- Payments should not exceed the approved level of funding.

Monitoring

Approved R&D grants and contributions should be monitored.

- For R&D grants, there should be reasonable assurance that funds are being used for the purpose intended.
- For contributions, payments should be in accordance with contribution arrangements.
- Audit requirements in the contribution arrangements should be met.

Management Information Systems

The management information system should provide to the appropriate managers reliable, relevant and timely information on program operations and expenditures.

Assessing Program Effectiveness

The objectives and effects of grants and contributions programs should be specified as precisely as possible.

Program objectives and effects that can be measured should be identified.

Procedures for measuring program effectiveness should reflect the state of the art and be cost-justified.

The results of effectiveness measurement should be reported.

Evaluations should be used to increase program effectiveness.

PAYROLL COSTS MANAGEMENT

PAYROLL COSTS MANAGEMENT

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PAYROLL COSTS MANAGEMENT

Introduction

3.1 In our 1979 Report, we presented the findings of our first government-wide audit of the management of the direct and indirect costs of employing people in the public service - a total payroll cost of \$8.6 billion. The audit examined the adequacy of the management controls in nine departments and agencies with respect to human resource planning, training, and human resource information systems, three main components of payroll costs management. We concluded in the 1979 Report that the management controls at the department level did not assure the economic acquisition and efficient use of human resources in the public service. Our recommendations sought to strengthen the Treasury Board Secretariat's management role and to foster improvements in departmental systems.

3.2 Given the importance of effective personnel management practices to the public service and the significance of deficiencies we found, we continued to review management controls over payroll costs as part of our comprehensive audits in 1980 and again in 1981.

3.3 Departments and agencies operate their human resource programs within the framework of policies and systems developed by the central agencies and are thus influenced to a significant degree by central agency policy direction. Therefore this year we concentrated on the policies and systems of the Treasury Board Secretariat and the Public Service Commission applicable to human resource planning, training, and human resource information systems. The policies and systems audited directly affect the management of payroll costs in 26 departments as well as a number of other agencies.

3.4 *We found significant weaknesses in central management controls over the development, implementation, monitoring and evaluation of policies and systems for human resource planning, training, and human resource information systems. In particular:*

- *policies of the Treasury Board Secretariat did not address departmental deficiencies and long-standing problems in human resource planning;*
- *the Treasury Board Secretariat's systems to monitor compliance and evaluate policies in all three areas were inadequate;*
- *extensive information required of departments and agencies had not been fully utilized by the Treasury Board Secretariat; and*

the Treasury Board Secretariat and the Public Service Commission had made limited progress in resolving duplication of human resource information systems at the central agency level.

3.5 The central agencies were aware of the weaknesses identified by our audit and were taking steps to improve policies and systems in these areas.

Central Agencies - Roles and Responsibilities

3.6 Responsibility and accountability for the management of payroll costs in the public service is shared by the central agencies and departments. The broad outline of the division of responsibilities related to human resource planning, training and human resource information systems is set out in the Financial Administration Act and the Public Service Employment Act.

3.7 Human Resource Planning. The Financial Administration Act empowers the Treasury Board Secretariat to "determine the manpower requirements of the public service and provide for the allocation and effective utilization of manpower resources within the public service". The Public Service Commission conducts human resource planning matters related to its staffing mandate under the Public Service Employment Act. It also has other responsibilities assigned to it by the Treasury Board Secretariat.

3.8 Training. Both the Treasury Board Secretariat and the Public Service Commission have statutory responsibilities for training. The Financial Administration Act empowers Treasury Board to "determine requirements for the training and development of personnel in the public service and fix the terms on which such training and development may be carried out". Under the Public Service Employment Act, the Public Service Commission is required to "operate and assist deputy heads in the operation of staff training and development programs in the Public Service".

3.9 Human Resource Information Systems. The Treasury Board Secretariat is responsible for government-wide policies on electronic data processing systems under its general administrative authority contained in the Financial Administration Act.

3.10 The Personnel Applications Centre in the Department of Supply and Services - Services Administration, acts as a government-wide service centre for computerized human resource information systems. Its role includes the design and operation of Treasury Board Secretariat systems as well as the provision of services to departments and agencies.

3.11 The central agencies delegate operational aspects of their authority to deputy heads in departments and agencies who exercise their authority within the framework of policies, systems and procedures established by the central agencies. The Treasury Board Secretariat also delegates and assigns responsibility to the Public Service Commission on matters related to policy formulation and evaluation and works closely with the Public Service Commission on the central management of human resource planning, training and human resource information systems in the public service.

3.12 The Personnel Policy Branch is the organization within the Treasury Board Secretariat which is responsible for developing, implementing, monitoring and evaluating policies and systems in the three areas audited.

Audit Scope

3.13 We examined the management controls in the Treasury Board Secretariat with respect to the development, implementation, monitoring and evaluation of government-wide policies and systems for human resource planning, training, and human resource information systems, and the activities of the Public Service Commission related to these areas. The components of payroll costs management covered by our audit have been defined as follows:

- human resource planning: ensuring that the appropriate numbers of people are available with the required skills, when and where they are needed;
- training: identifying and meeting present and future skill, knowledge and attitudinal requirements to improve job performance and to cope with technological and other changes; and
- human resource information systems: providing managers with basic personnel information; that is, profiles of employees and positions in an organization.

We did not include language training, Equal Opportunities Programs or the operational training role of the Public Service Commission in the scope of our audit.

3.14 The Personnel Management areas reviewed by this audit constitute only a part of the activities of the Treasury Board Secretariat and the Public Service Commission; no inferences should be drawn concerning management controls in other areas within these central agencies.

Summary of Audit Observations

3.15 As a result of our findings in the comprehensive audits over the past three years, we have concluded that departments generally lacked effective

human resource planning systems and did not as a result anticipate or develop plans for dealing with staff shortages and surpluses. We also concluded that training needs were not properly identified and that training systems in the public service were not adequately planned, costed or evaluated and that proliferation of human resource information systems and duplication of data between departments and central agencies continued to exist.

3.16 Our audit of the policy activities at the central agency level in these three areas revealed that, with the exception of training, limited progress had been made in addressing these deficiencies and in strengthening the Treasury Board Secretariat central management role.

3.17 At the time of our audit, the Treasury Board Secretariat had not resolved the practical problems of departments in implementing human resource planning in a public service environment such as the problem of linkage to other departmental planning processes. Nor had they established effective processes to identify occupational groups in which critical resource problems existed. We did note that the Treasury Board Secretariat was aware of these deficiencies and was addressing them through the establishment of a task force to examine human resource planning practices in the public service.

3.18 In the area of training, the Treasury Board Secretariat had made substantial progress with the publication in June 1980 of a staff training policy which, with its associated directives and guidelines, was designed to strengthen the management of training activities at both central and departmental levels.

3.19 With respect to human resource information systems, we noted that the Treasury Board Secretariat did not have a mechanism in place that effectively controlled the proliferation of human resource information systems in departments and agencies. On 31 August 1981, however, the Treasury Board Secretariat issued its first policy on human resource information systems which set the framework for this type of control. We also observed that the Treasury Board Secretariat and the Public Service Commission had not made significant progress in reducing duplication between their systems in spite of the expenditure of significant resources.

3.20 We noted in all three areas audited that the Treasury Board Secretariat did not have adequate monitoring or evaluation systems. We concluded that the Treasury Board Secretariat could not determine whether departments and agencies were complying with its policies and directives or whether its policies were accomplishing what was originally intended.

3.21 We observed throughout this audit that the Treasury Board Secretariat was working closely with the Public Service Commission to improve the policies and systems in the three areas audited.

Audit Criteria

3.22 The criteria applied in our audit of the management controls over the policies and systems developed by the central agencies were reviewed with the central agencies, tested and, in some cases, modified during the audit. These criteria establish what we consider to be reasonable standards against which the policies and systems in the three areas audited should be assessed. The audit observations reported in this chapter directly relate to one or more of the following audit criteria:

Responsibilities for developing, implementing, monitoring and evaluating policies and systems should be clearly defined and communicated to all those concerned.

- Conflicts in roles and responsibilities that relate to policy and system formulation should be identified and resolved.

Policies and systems should be developed and/or revised in a manner that ensures due consideration is given to the needs of departments and agencies and the resource implications of implementing them.

- The relevant needs, problems and deficiencies in departmental and agency programs should be determined and taken into account when assessing the need to develop or revise policies and systems.
- Alternative policies and systems should be evaluated in terms of likely effectiveness, operational and cost implications for departments and agencies and compatibility with other policies and systems.
- Policies and systems should be communicated clearly to departments and agencies and should include guidelines as appropriate.

Policies and systems should be monitored to assess compliance and evaluated to assess their effectiveness.

- Systems should be in place to monitor the adherence of departments and agencies to policies and systems and to evaluate the degree to which they are achieving the desired result in a cost-effective manner.
- The results of monitoring and evaluation should be used in the revision and development of policies and systems.

3.23 The criteria applied in our audit of the design and operation of the internal human resource information systems of the central agencies were those published in our 1979 annual Report.

Human Resource Planning

Background

3.24 From 1970 through 1979, the Treasury Board Secretariat developed and issued a number of policies that established the framework within which departments and agencies conduct human resource planning activities. These policies include Executive Planning and Development (1971), Roles and Responsibilities for Human Resources Planning in the Public Service (1974) and Personnel Management Planning (1979). In 1975, the Treasury Board Secretariat also published descriptive material on human resource planning in a Personnel Management Guide.

3.25 The 1974 policy on roles and responsibilities defines the roles of the Treasury Board Secretariat, the Public Service Commission and departments in human resource planning. It assigns responsibility to the Public Service Commission for carrying out human resource planning for certain occupational groups when so directed by the Treasury Board Secretariat. The policy also states that the Treasury Board Secretariat and the Public Service Commission will conduct human resource planning across the public service for critical occupational groups and for other groups of employees such as Senior Executives.

3.26 Two of the policies require departments and agencies to forward information on human resource planning to the central agencies. The Personnel Management Planning policy requires that departments and agencies submit reports to the Treasury Board Secretariat describing the personnel actions required to deal with changes affecting human resources. The policy on Executive Planning and Development requires that summaries of appraisal information and succession planning charts be submitted to both the Treasury Board Secretariat and the Public Service Commission. Departments are also required to submit the performance review and appraisal documents on senior executives to the Public Service Commission.

Observations and Recommendations

3.27 Policy development. The Treasury Board Secretariat consulted extensively with departments when it was developing its human resource planning policies. These consultations indicated that, although departments agreed that human resource planning was essential to good management practice, they were concerned about its practical application in the public service. Departments expressed concerns about the practicality of applying human resource planning universally to all groups and levels, the lack of a clear relationship between human resource planning and other personnel systems such as performance appraisal, staffing and training, and the tenuous linkage between human resource planning and other planning processes.

3.28 The comprehensive audits conducted this year and reported in other chapters of this Report indicate that, with a few exceptions, the problems observed in 1979 still remain. Departments generally lacked effective human resource planning systems and continued to deal with problems of staff surpluses or shortages after they had arisen, rather than anticipating problems and developing appropriate action plans. It was also evident that operating managers still did not consider human resource planning to be an integral part of their function and perceived it to be the responsibility of staff advisers in personnel branches.

3.29 The most recent policy, Personnel Management Planning, provided direction and guidance to departments regarding the completion of information reports, and only by implication did it and previous policies address the departmental concerns and deficiencies noted above. We also observed that the direction given to departments in the Personnel Management Planning policy was not clear, resulting in considerable variation in the content of the reports submitted to the central agencies. We believe that these matters have contributed to the overall deficiencies of human resource planning at the departmental level.

3.30 The Treasury Board Secretariat established a task force, in January 1981, composed of departmental and central agency representatives, to study human resource planning practices both inside and outside the public service; to develop a proposal for a human resource management system model; and to submit recommendations to overcome obstacles to effective human resource planning in the federal public service.

3.31 *The Treasury Board Secretariat should review and, where appropriate, revise its human resource planning policies and guidelines to ensure that departmental needs, problems and deficiencies are taken into account and should assist departments, as required, in the application of policies to unique departmental circumstances.*

3.32 The Treasury Board Secretariat did not always give due regard to efficiency when developing human resource planning policies. For example, the cost implications of implementing human resource planning policies, both for the Treasury Board Secretariat and for departments and agencies, were not addressed prior to implementation. This omission is significant, particularly in light of the resources used by departments to complete the information reports requested in the policies.

3.33 The Personnel Policy Branch has established a special task force to recommend procedures to be followed by its staff in developing and promulgating policies, including the requirement to cost policy implications.

3.34 Government-wide human resource planning. In carrying out their responsibilities for conducting human resource planning across the public service for critical occupational groups, the Treasury Board Secretariat and the Public Service Commission have focused attention on the Senior Executive category and more recently, on the Financial and Personnel Administration groups. They have also responded to urgent regional or occupational group problems as they arose.

3.35 Apart from these human resource planning activities which concern only a small proportion of the total public service, the Treasury Board Secretariat has not met its overall responsibilities for government-wide human resource planning as outlined in the policy on Roles and Responsibilities for Human Resources Planning in the Public Service.

3.36 The Treasury Board Secretariat has not, for example, analysed the overall human resource requirements of the public service to determine current or future government-wide resource imbalances or to identify critical occupational groups for which human resource planning should be carried out by the central agencies. Generally, the Treasury Board Secretariat has responded to regional or occupational group problems such as the shortage of petroleum engineers and scientists in Western Canada, when problems became urgent rather than by anticipating the human resource shortages and ensuring that action plans were developed to avoid critical situations. It is our view that effective manpower utilization in the public service depends on the ability of the Treasury Board Secretariat to identify critical problems early and ensure that plans are established for their resolution before a crisis occurs.

3.37 *The Treasury Board Secretariat should regularly assess human resource requirements in the public service, identify critical occupational groups for which human resource planning should be carried out by the central agencies and ensure that the appropriate action is taken.*

3.38 At the time of our audit, a human resource planning and counselling program was being developed for the new Management Category which is to replace the present Senior Executive category. Because these plans were being developed and the respective roles of the Treasury Board Secretariat and the Public Service Commission were not yet clarified, we did not audit this program.

3.39 Policy monitoring and evaluation. The Treasury Board Secretariat did not have systems in place to monitor or evaluate its human resource planning policies other than the requirement for planning information from departments in the form of annual reports.

3.40 The reports required from departments by the Personnel Management Planning policy were originally intended to be the source of government-wide information on human resource planning from which the Treasury Board

Secretariat could carry out its responsibility for government-wide planning. We found, however, that the information was often inconsistent or unreliable; for example, the level of detail ranged from single page reports to reports of up to 95 pages.

3.41 We concluded that the Treasury Board Secretariat did not know the extent to which departments and agencies were complying with its human resource planning policies or whether the policies and guidelines were accomplishing what was intended. As a result, the Treasury Board Secretariat did not know whether departments and agencies had adequate human resource planning systems in place.

3.42 In March 1981, the Personnel Policy Branch published a policy on Personnel Management Monitoring, Audit and Evaluation which stated the Treasury Board Secretariat's intention to monitor the implementation of its personnel policies and systems and to evaluate their effectiveness.

3.43 *The Treasury Board Secretariat should ensure that its monitoring and evaluation processes for human resource planning gather sufficient information on departmental and agency human resource planning systems to enable it to assess compliance with its policies and to determine the deficiencies and problems in departments and agencies.*

Training

Background

3.44 Over the last decade, the Treasury Board Secretariat has developed a number of policies and guidelines which have established the framework within which the departments and agencies have carried out their training activities. The most significant policies relating to general departmental training and development activities, issued prior to 1980, include:

- Roles and Responsibilities for Training and Development in the Public Service (1977);
- Identification of Training and Development Needs and the Evaluation of Results (1977); and
- Conditions Governing Education, Training and Development, Including Subsidization (1978).

3.45 We stated in our 1979 annual Report that management could not be assured that value for money was received from expenditures on training and development in the federal public service. We noted that training needs were not well defined. Training was often poorly planned, its full costs were not captured

and it was not adequately evaluated. We recommended that the Treasury Board Secretariat strengthen its policies with respect to these matters.

3.46 In response to the concerns expressed about training in the reports of the Special Committee on the Review of Personnel Management and the Merit Principle, and of the Royal Commission on Financial Management and Accountability and to the recommendations in our 1979 Report, the Treasury Board Secretariat issued a new training policy in June 1980. This policy defines the responsibilities of departments, the Public Service Commission, the Treasury Board Secretariat and individual employees in the training process. It addresses specific aspects of training such as conditions under which it will be provided, selection of trainees and training evaluation.

3.47 The policy also provides for the direction and co-ordination of training and development activities in the public service through a new Staff Training Council. The Council membership includes senior officers of the Treasury Board Secretariat, the Public Service Commission, the Privy Council Office, the Office of the Comptroller General, and deputy ministers of five departments. It is chaired by the Secretary of the Treasury Board. The Treasury Board Secretariat plans to establish a number of training boards composed of departmental and agency representatives to serve as working arms of the Council. One board was established in January 1981 to deal with management training matters.

3.48 The Treasury Board Secretariat has also published a draft Training Administration Guide and a Managers' Guide to Training. The Training Administration Guide is a statement of the administrative requirements necessary for effective implementation of the Staff Training Policy, and it has been distributed to departments for their review and comment. The Managers' Guide, designed to ensure consistent application of the Staff Training Policy and related administrative guidelines by all departments and agencies, has been distributed initially in draft form to selected departments.

Observations and Recommendations

3.49 Policy development. Many of the weaknesses identified in departmental training activities during our 1979 comprehensive audits still existed in 1981. Consequently, this Office supports the steps taken by the Treasury Board Secretariat in issuing a new Staff Training Policy and its associated directives and guidelines. When fully implemented, they should contribute to significant improvements in the management and operation of training in the public service.

3.50 We also noted that the Personnel Policy Branch had addressed the recommendations in our 1979 annual Report by setting out minimum requirements for training needs identification and course evaluation in the new policy, directives and guidelines and by establishing a new computerized system for obtaining departmental training cost data.

3.51 Our audit revealed, however, that the Treasury Board Secretariat did not follow a systematic approach to developing and communicating the new Staff Training Policy. For example, the Secretariat did not clarify the new policy's relationship with existing policy nor did it issue the directives and guidelines until several months after the policy was published. This situation initially caused some concern and confusion in the departments and agencies.

3.52 The new policy states that the effectiveness of processes to identify training needs in departments and agencies is closely related to the effectiveness of their human resource planning and performance appraisal systems. Our comprehensive audits, however, have continually revealed that processes to identify training needs, human resource planning systems and the relevant aspects of performance appraisal systems were not functioning adequately. We noted that Treasury Board Secretariat is now seeking to improve human resource planning and its associated systems through the establishment of the task force on human resource planning.

3.53 In the new Staff Training Policy, the Treasury Board Secretariat has delegated authority to the Public Service Commission to audit certain aspects of training in departments and agencies. We noted that the roles of the Treasury Board Secretariat and the Public Service Commission in auditing departmental training programs were not clear. The central agencies were, however, in the process of clarifying their respective responsibilities through the Staff Training Council.

3.54 **Policy monitoring and evaluation.** The Treasury Board Secretariat has not formally monitored compliance with or evaluated policies on training and development apart from requiring annual information reports from departments and agencies. These reports, although extensive, were used to only a limited extent by the Treasury Board Secretariat. In support of the new Staff Training Policy, the Personnel Policy Branch identified a number of processes for monitoring and evaluating training activities. These included auditing professional training standards of departments and agencies and obtaining information from them on their annual training plans, training costs and courses. Specific implementation plans for these new monitoring and evaluation activities were being developed while this audit was in process.

3.55 The data on department and agency training activities, related costs and courses are to be obtained through a new computerized training and development information system. This system is now being tested in six pilot departments. The Treasury Board Secretariat had not conducted a cost-benefit analysis of the proposed system as required by the Treasury Board's guidelines for development of electronic data processing projects.

3.56 *Treasury Board Secretariat should conduct a full cost-benefit analysis of the new training and development information system upon completion of the pilot projects and prior to government-wide implementation.*

Human Resource Information Systems

Background

3.57 For many years, the central agencies and departments have recognized that the proliferation of computerized human resource information systems has led to a number of inefficiencies. These include duplicate data capture and processing, and reconciliation problems between the central agencies and between central agency and departmental systems.

3.58 In response to these concerns, the Treasury Board Secretariat commissioned, in 1978, a study of human resource information systems in the public service. This study concluded that there was no overall concept for the development and evolution of these systems and recommended controlled development of such systems.

3.59 Our 1979 audit of human resource information systems in various departments confirmed many of the problems noted in previous studies. We recommended that directives and guidelines being developed by central agencies should foster the economic and efficient development and operation of human resource information systems.

3.60 Concurrent with our 1979 audit, the Treasury Board Secretariat and the Public Service Commission jointly commissioned a study to propose solutions to resolve the long-standing problems of human resource information systems in the federal government. The findings of this study were contained in a report entitled "Personnel Data Systems in the Public Service and Recommendations for Their Improvement", dated May 1979. This report identified the key issues that have hindered the planned development of human resource information systems and made a series of recommendations to resolve them.

3.61 **Senior Steering Committee/Co-ordinating Office.** Acting on recommendations of the 1979 study, the Treasury Board Secretariat, the Public Service Commission and the Personnel Applications Centre established a Senior Steering Committee and a Co-ordinating Office in 1979 to ensure rational and co-ordinated implementation of new and revised human resource information systems. Both committees are composed of members from the three organizations. The Senior Steering Committee was established to provide the impetus for action on the recommendations of the study. The Co-ordinating Office is responsible for co-ordinating the implementation of projects originated by the Senior Steering Committee.

3.62 The Treasury Board Secretariat. In support of its overall operational and general management needs, the Treasury Board Secretariat operates the Personnel Management Information Systems (PMIS) which is made up of six major computer-based systems for processing personnel data. These are the:

- Incumbent/Mobility System;
- Official Languages Information System;
- Attendance/Leave/Overtime and Shift-work System (ALOSS);
- Exclusions System;
- Entitlements and Deductions System; and
- new Management Category Information System.

The Secretariat operates PMIS for its own use but makes information from it available to departments and agencies. Departments and agencies are required to provide data for PMIS.

3.63 Public Service Commission. In support of its staffing mandate defined in the Public Service Employment Act, the Public Service Commission operates three major computer-based human resource systems:

- Data Stream and Senior Executive Information System (being replaced by Management Resource Information System);
- Staffing Action System (being replaced by Appointment Information System); and
- Language Training System/Language Knowledge Examination System.

The Public Service Commission also operates nine other smaller human resource information systems.

Observations and Recommendations

3.64 Central human resource information systems. The Public Service Commission has been replacing and upgrading its human resource information systems. Therefore, we did not conduct an in-depth audit of the existing systems. We did note, however, that documentation on these systems did not include a general systems description. This made it extremely difficult to gain a full understanding of all the elements of the system.

3.65 With regard to the human resource information systems of the Treasury Board Secretariat we observed that prior to implementing its major systems such as ALOSS, the Treasury Board Secretariat did not determine the costs, benefits and impact on departments and agencies of the proposed systems and their alternatives. These assessments are required by Administrative Policy Branch standard procedures for the control of the development of electronic data processing systems.

3.66 *In developing its human resource information systems, the Treasury Board Secretariat should adhere to Administrative Policy Branch standard procedures for control of the development of electronic data processing projects, with particular reference to feasibility studies and consideration of the costs and operational impact on departments of proposed systems.*

3.67 Documentation of the PMIS systems was satisfactory. We noted that, except for the Attendance/Leave/Overtime and Shift-work System (ALOSS), the users within the Treasury Board Secretariat were satisfied with the degree to which the major systems met their needs.

3.68 A study conducted in 1978 on behalf of the Treasury Board Secretariat expressed significant concerns with respect to ALOSS. The study noted the user requirements that were not being met by the system, the high demands placed by the system on departmental resources and the low acceptance of the system by departments. The Secretariat subsequently examined the feasibility of upgrading ALOSS, but concluded that the cost of doing so would outweigh the benefits. This audit revealed that ALOSS still does not meet user requirements for overtime data, a significant component of the system. In light of the resource impact of this system on departments and the problems noted, we consider that further review of this system is required. During the latter stage of our audit, the Treasury Board Secretariat was developing plans to re-examine this matter.

3.69 In reporting the costs of ALOSS to departments, the Treasury Board Secretariat included its internal operating costs only. It did not include departmental costs of inputting data or the cost to the Department of Supply and Services of converting source documents to computer-readable medium. A study conducted by the Treasury Board Secretariat indicated that these additional costs were far in excess of the internal operating costs.

3.70 We noted that the Public Service Commission has no regular procedures that consolidate all its human resource information system costs. We also noted that the Public Service Commission does not capture costs to departments of supplying data to the Public Service Commission's systems. This prevents adequate cost-benefit assessments of these systems.

3.71 *The Treasury Board Secretariat and the Public Service Commission should, to the extent feasible, ensure disclosure of the full costs of their human resource information systems including departmental and other operating costs.*

3.72 During the comprehensive audits of departments conducted this year, departments expressed the concern that the central agencies, prior to implementation, did not fully consider the operational impact of the demands imposed by central human resource information systems on the departments. Departments were also concerned, in light of the potential duplication and costs to them of providing data for central agency systems, that they had inadequate participation in the initial development of policies and government-wide systems. We noted that the Treasury Board had taken steps to increase departmental participation in these areas. However, given the departmental concerns, the Treasury Board Secretariat needs to ensure better communication with departments and greater departmental participation in the planning, design and development of government-wide systems.

3.73 *The Treasury Board Secretariat should ensure that adequate departmental participation is obtained in the development of government-wide human resource information policies and systems.*

3.74 The original mandate of the Personnel Applications Centre in the Department of Supply and Services was to design, maintain and operate the Treasury Board Secretariat's human resource systems and provide a wide range of services to departments and agencies. We found that the Personnel Applications Centre had focused its attention on upgrading the Treasury Board Secretariat's systems and had provided limited services to departments. In our view, if duplication of data capture and processing is to be reduced, the Personnel Applications Centre or some other organization must play a central role in co-ordinating systems development and operation among the Public Service Commission, the Treasury Board Secretariat and the departments. At the time of our audit, the central agencies were reviewing the role of the Personnel Applications Centre with respect to central co-ordination.

3.75 **Human resource information systems policy.** The Personnel Policy Branch of the Treasury Board Secretariat has primary responsibility for policy development with respect to human resource information systems. Until recently, the Branch has directed most of its efforts to developing its own systems. It has not played a strong management or policy role with respect to departmental human resource information systems. The Branch issued a Personnel Data Element Dictionary, the use of which became mandatory in 1978, and published a paper on Personnel Data Systems in 1980; it did not, however, have mechanisms in place to determine the degree of compliance with the requirement to use the dictionary. Nor had it issued any policies or guidelines specifically governing the development of departmental human resource information systems in the public service prior to this audit. On 31 August 1981, however, the Personnel Policy Branch published a "Policy for Personnel Data Systems in the Public Service of

Canada". This policy addresses our 1979 recommendations concerning the proliferation of human resource information systems and the duplication of data by requiring departments to justify their information needs to the Treasury Board Secretariat prior to developing or revising systems.

3.76 Inter-agency activities. The Treasury Board Secretariat and the Public Service Commission have taken steps to resolve the long-standing problems of human resource information systems in the public service through the activities of the Senior Steering Committee/Co-ordinating Office established in 1979. Both central agencies have given strong support to these committees. The Senior Steering Committee/Co-ordinating Office has initiated a number of projects designed to resolve problems of duplication of data among the central agency systems. One project resulted in the elimination of the Public Service Commission separation document which should reduce the reporting burden on departments and eliminate the problems of reconciling data. Another project resulted in agreement between the Treasury Board Secretariat and the Public Service Commission to use a common input form for language training data.

3.77 A number of other projects initiated by the Senior Steering Committee/Co-ordinating Office had achieved only limited success after the expenditure of considerable resources. This applies to projects designed to reduce duplication created by the Personnel Pay Input form (2517T), a major source of government-wide duplication; to the joint development of a senior management information system, originally planned to be a model of joint system development; and to the merger of the systems development capabilities of the Public Service Commission and the Treasury Board Secretariat. We found that the principal factor contributing to the limited success of joint projects was a lack of agreement between the Treasury Board Secretariat and the Public Service Commission on issues of major significance.

3.78 In the case of the joint development of the senior management information system, for example, the two agencies had difficulty reconciling different methodological approaches to systems development and took eight months to agree on what the specific problems were with the existing systems and on the information needs of each agency. As a consequence, they did not meet established deadlines and proceeded to develop their own systems with plans to resume joint development at a later date.

3.79 The merger project was initiated by the Senior Steering Committee to reduce central agency duplication by merging the computer systems development, implementation and operational services units of both agencies into one organization. We noted that, after two years of intensive study, the staff within the Treasury Board Secretariat and the Public Service Commission still did not agree on fundamental questions such as whether the merger would be in fact cost-beneficial. Although the Treasury Board Secretariat fully supported the merger concept, we found that there were serious reservations within the Public Service Commission with respect to the merger's technical and operational feasibility.

We also observed that the project was not preceded by a thorough review of the overall constraints and alternatives. We believe that the above matters significantly reduced the likelihood of the successful outcome of this project. Due to the above noted problems, the Senior Steering Committee recently deferred the merger and initiated studies on a common data pool. We believe that a considerable amount of non-productive effort could have been avoided had the central agencies adequately examined alternatives prior to commencing the merger project.

3.80 The Senior Steering Committee/Co-ordinating Office was originally established on a temporary basis to implement the recommendations of the 1979 report on personnel data systems in the public service. In view of the significance of the problems yet to be resolved, these committees need to be maintained on a permanent basis with continued high level support.

3.81 *The Senior Steering Committee/Co-ordinating Office should be established on a permanent basis until such time as the duplication between the central agency systems has been resolved.*

3.82 Neither the Treasury Board Secretariat nor the Senior Steering Committee had developed an overall plan for improving human resource information systems in the public service. We believe that a long-term plan, from which objectives and priorities can be established and action plans developed, is essential to achieving economy and efficiency in the development and operation of human resource information systems in the public service.

3.83 *The Treasury Board Secretariat should develop a long-term plan to resolve the problems of proliferation and duplication of human resource information systems in the public service.*

MANAGEMENT OF PHOTOCOPYING

MANAGEMENT OF PHOTOCOPYING

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MANAGEMENT OF PHOTOCOPYING

Introduction

4.1 Photocopiers have become an essential and ubiquitous tool in supporting the operations of government. Departments and agencies of the federal government owned or rented approximately 6,250 copiers and produced some 75 million photocopies in November 1980. On an annual basis, that amounts to about 900 million copies. Although the costs of photocopying in a single department or agency may sometimes not appear significant, a conservative estimate suggests that, including labour, government-wide costs are likely to be in excess of \$50 million a year.

4.2 In addition to its more direct benefits and costs, photocopying has other characteristics that make it an important resource which must be properly managed if value for money is to be obtained. In particular, photocopying has a capacity to generate significant indirect costs by providing a readily accessible and inexpensive means for reproducing information. Although most photocopying undoubtedly facilitates communication, it also leads to the use of valuable time in handling, reading, filing or otherwise disposing of copied material. To the extent that copies are produced and distributed unnecessarily, these indirect costs are not offset by any benefits.

4.3 The purpose of our audit of the management of photocopying within government was to assess whether existing policies, procedures and practices for the acquisition and use of equipment and services demonstrated due regard for economy and efficiency.

4.4 We recognize that the importance of photocopying in communication within departments, its decentralized nature, and the easy access all employees have to photocopiers make the implementation of cost-effective controls difficult. The Treasury Board has identified photocopying as one of the areas in which administrative restraint is to be exercised and there is an indication that expenditures on photocopying across government have stabilized in recent years. Nevertheless, we concluded as a result of our audit that further improvements in control and direction at both central and departmental levels are possible and justified.

Extent and Costs of Photocopying

4.5 A photocopier is generally defined as a device used to produce copies of documents directly from an original, as distinct from a duplicator which uses an intermediate master copy. Photocopying equipment in use within departments and agencies ranges from small desk-top models to large, sophisticated machines

which may, in some cases, compete with duplicators in terms of production volumes and costs.

4.6 The Department of Supply and Services - Supply Administration (DSS-Supply) produces an annual *Photocopier Data Package* to assist departments and agencies in acquiring and managing photocopying equipment. This document divides photocopying requirements into two broad categories: convenience photocopying for up to 40,000 copies a month, and high-speed photocopying for more than 40,000 copies a month.

4.7 Most convenience copiers are operated by users on a first-come, first-served basis. Although intended to produce a relatively small number of copies per job, they provide ready access and quick turnaround to a limited number of localized users. High-speed copiers are usually centralized, have full-time operators and are used for long production runs. They generally produce copies more cheaply than convenience copiers but do not offer the same degree of convenience to users. Achieving an appropriate balance between convenience and cost is one of the key issues in the management of photocopying.

4.8 The past decade has seen a substantial increase in the range and capability of equipment available. Data from the Treasury Board Secretariat show that, between 1972-73 and 1975-76, the annual rental costs for photocopying equipment in the federal government increased significantly from \$7.3 million to approximately \$24 million. Although we have not been able to estimate the extent to which inflation contributed to this increase, it is unlikely that it would have accounted for more than a minor part. Over the next three years, annual rental costs increased much more slowly to \$26 million in 1978-79. This slower rate of increase probably reflected a combination of administrative restraint and an associated increase in cost awareness, reduced rental costs resulting from increased competition among suppliers and, perhaps, a degree of market saturation.

4.9 To obtain more complete and current information on the extent and costs of photocopying across government, we carried out a survey of the departments and agencies listed in Schedules A and B of the Financial Administration Act and the larger branches designated as departments for purposes of the Act. Where we were unable to get complete information from some departments and agencies, we made conservative estimates.

4.10 Our estimates based on this survey show that, in November 1980, the government owned or rented about 6,250 photocopiers. Most of these machines (98 per cent) were convenience copiers. The majority of copies (75 per cent) were produced on convenience copiers and thus reflected relatively short runs in terms of numbers of originals as well as copies per original. The remaining 25 per cent of copies represented the large-scale production of high-speed photocopiers. A

significant proportion of this comprises the production of high-speed copiers operated by DSS-Supply in its printing plants.

4.11 The following table lists the more significant elements of photocopying costs that we identified. Based on information from the survey and the assumptions shown in the table, we have estimated that the cost of photocopying across the government is over \$50 million a year. There are other costs of photocopying, such as the purchase of copy services from the private sector and the energy consumed by copying equipment, where we had no basis for making estimates.

Annual Costs of Photocopying in the Federal Government (Estimated)

<u>Type of Cost</u>	<u>Amount</u> (Thousands of Dollars)
Rented Copiers	
- including rental and supplies	\$ 24,240
Purchased Copiers	
- including amortization (straight-line, 60 months), maintenance and supplies	2,300
Full-time Operators	
- assuming payroll cost of \$20,000 a year for each operator	3,400
User-Operators (Convenience Copiers)	
- assuming 10 copies and 2 minutes a trip and salary cost of \$15,000 a year	18,530
Space	
- assuming 5 square metres per machine @ \$100 per square metre	<u>3,120</u>
Total	<u>\$ 51,590</u>

4.12 With respect to unit costs, we found that the cost per copy of rental and supplies for convenience copiers used in departments and agencies (3.6 cents) compared favourably with similar information from some large users of convenience copiers in the private sector and a provincial government. Cost per copy for high-speed copiers was 1.8 cents. It should be noted that neither of these per-copy costs is all-inclusive, in that overheads and labour costs are not taken into account. Cost per copy, however, is not a fully reliable indicator of economy. A rental fee for a convenience copier usually consists of a flat rate per month and an additional charge for each copy made. In other words, the greater the volume of copies, the lower the per-copy cost would be; however, the total monthly rental cost would be higher. Our audit did not attempt to establish the extent to which copies being made were in fact necessary.

Audit Scope

4.13 We assessed the following functions, using criteria based on those developed for the audit of materiel management reported in Chapter 2 of our 1980 annual Report:

- assignment of responsibility for the management of photocopying;
- analysis of photocopying needs and requirements, and the acquisition of equipment and services;
- controls; and
- information to support photocopying management.

4.14 In assessing these functions we reviewed the policies and directives developed by Treasury Board with respect to photocopying, and the ways in which their application was monitored. We also examined the role and activities of DSS-Supply, which provides guidance and help to departments and agencies in managing the acquisition and use of copying equipment through its Office, Technical and Construction Products Centre. In addition, DSS-Supply provides copying services through the Canadian Government Printing Office's Outside Plants Branch.

4.15 We examined the management of photocopying mainly in the National Capital Region headquarters of the following six organizations:

- Employment and Immigration;
- Environment;
- Industry, Trade and Commerce;
- National Health and Welfare;
- National Revenue - Taxation; and
- Secretary of State.

These six organizations accounted for about 24 per cent of the copiers in use and 19 per cent of the copies produced in departments and agencies during November 1980.

4.16 During the audit we obtained information on management practices in other jurisdictions as they relate to photocopying. We had discussions with a number of firms in the private sector that use photocopiers extensively in their operations, and interviewed commercial suppliers of copy services to gain an

understanding of service alternatives available to government departments and agencies.

Summary of Audit Observations

4.17 Assignment of responsibility. In 1976, Treasury Board identified photocopying as one of the areas for administrative restraint across government. The administrative restraint program required DSS-Supply to exercise some control over departmental acquisitions of photocopying equipment through a pre-procurement review. Because DSS-Supply has perceived that control is not consistent with its primary service role, it no longer carries out the pre-procurement review to ensure that departments are acquiring suitable equipment at least cost.

4.18 With respect to high-speed copiers, DSS-Supply provides both advice and assistance to departments to help them acquire the most cost-effective equipment. In the case of convenience copiers, DSS-Supply produces and provides an annual *Photocopier Data Package* to enable users to select and requisition, through DSS-Supply, the least cost equipment consistent with copying requirements. DSS-Supply accepts all properly authorized requisitions, but reports to Treasury Board when departments have chosen equipment which is not within \$25 per month of the least rental cost identified in the Data Package. These reports show that departments have not always chosen to rent copiers in the least cost range.

4.19 Definition of needs and requirements. Departments have generally favoured the convenience of renting or buying their own equipment rather than using DSS-Supply or private sector copying services. In reviewing the processes for defining needs and requirements, we found that departments were frequently not assessing the real level of copying service needed or weighing the costs and benefits of alternative ways of meeting copying needs. DSS-Supply Outside Plants Branch had not maintained service standards in all cases and departments did not always have a clear perception of the level of service they could expect from DSS copy centres in meeting high volume copying needs.

4.20 Acquisition. The usual method of acquisition has been to rent photocopiers rather than to buy them outright. Although we recognize that it is administratively simpler to rent, we found that departments were not systematically assessing the relative economic benefits of purchase and rental to help them make informed acquisition decisions. Using conservative assumptions, our analysis of a number of rentals showed that, in a large proportion of these cases, savings could have been achieved through purchasing the equipment. In practice, of course, any potential savings would have to be considered in the context of other factors affecting the acquisition decision, including maintenance and service considerations, and the possible impact of changing technology and market conditions.

4.21 Treasury Board has not required departments and agencies to assess the cost-effectiveness of various methods of acquiring photocopiers. However, a policy on the cost-effective acquisition of moveable assets in general was under development at the time of our audit.

4.22 **Controls.** Some of the departments we audited had introduced procedures and practices to control waste in the use of copying equipment. In others, few controls were in place. In all the departments, some improvements were possible in such areas, for example, as the implementation of measures to increase employees' awareness of copying costs and to promote sound copying practices.

4.23 The *Photocopier Data Package* focuses primarily on the acquisition of convenience copiers. Although a useful guide to departments and agencies faced with the need to choose from an extensive range of equipment and complex pricing plans, the document includes only a brief section on the in-service management of photocopying. This section of the document could be strengthened to provide a basis for departments and agencies to develop practical photocopying management techniques suited to their specific requirements.

4.24 **Information.** The departments audited had not developed adequate means to assess how effective they were in managing and controlling photocopying resources. With some exceptions, the departments had not established procedures to monitor the costs of photocopying and use of photocopiers, or developed reports to inform management of costs and trends. The absence of information in departments increases the potential for proliferation of copiers and wasteful copying practices.

4.25 At the time of the audit, Treasury Board policies with respect to materiel utilization were being expanded to include consumption control policies. Among other things, these will refer to the need for departments and agencies to monitor materiel costs and rates of use.

Observations and Recommendations

Assignment of Responsibility

4.26 In its Policy Circular 1976-2, issued in January 1976, the Treasury Board identified a number of areas in which fiscal restraint was to be exercised and reductions in the level of administrative expenditure were to be achieved. Photocopying equipment was specifically identified as one of those areas. DSS-Supply was assigned responsibility for reviewing all requisitions for the purchase or rental of copying equipment with a view to permitting:

recommendations to be made in a more formal manner to customer departments and agencies on the maximum economies to be obtained, for example from the use of a different type of machine or from the pooling of existing departmental equipment.

4.27 The requirement for DSS-Supply to review all requisitions from departments and agencies amounted, in effect, to a control over their selection and acquisition of copying equipment and was seen as such. This exercise of a control function by DSS-Supply resulted in considerable antagonism when departments felt they were being denied the amount or type of equipment that they believed they required. At the same time, DSS-Supply perceived that its service role was being compromised by the need to exercise control over departmental acquisition of equipment.

4.28 In July 1980, DSS-Supply stopped its pre-procurement review practice and gave Treasury Board written notice of its decision. For high-speed copiers, DSS-Supply provides advice and assistance to departments on an individual case basis to help them acquire the most cost-effective equipment. With respect to convenience copiers, DSS-Supply produces an annual *Photocopier Data Package* which contains the specifications of most available convenience copiers and auxiliary equipment, rental price information, terms and conditions based on annual standing offers negotiated with equipment suppliers, and purchase prices for equipment, accessories and supplies. The Data Package is a valuable publication that is used extensively by departments and agencies faced with making choices from a wide array of increasingly complex equipment and pricing plans.

4.29 With the exception of some remote areas of the country where all photocopier requirements are handled by DSS-Supply on an individual basis, the Data Package provides the basis upon which departments and agencies submit requisitions to DSS-Supply for convenience copiers. For its part, DSS-Supply accepts all departmental requisitions for convenience copiers that are:

- least cost in any particular volume range;
- within \$25 rental per month of the least cost equipment; or
- above least cost, provided that the requisition, signed by the appropriate authority, indicates an awareness and an acceptance of the additional expense to the department.

4.30 Since November 1980, a monthly exception report, listing contract requisitions for convenience copiers processed by DSS-Supply that exceed the least cost category by more than \$25 per month, has been forwarded to Treasury Board. Reports covering the five-month period from 1 November 1980 to 31 March 1981, showed that the failure of departments to rent least cost (or within \$25 per month of least cost) convenience copiers resulted in additional costs to

the government of about \$580,000. This represented almost six per cent of the total value of convenience photocopier contracts processed over the same period. Treasury Board has accepted the responsibility for control and, at the time of our audit, was in the process of developing a plan of action which will require departments to provide it with written explanations for exceeding the least cost options.

4.31 In reviewing the assignment of responsibility in departments, we found that all had designated officers to carry out the various functions involved in the management of photocopying. However, in some departments the responsibility was assigned as part of materiel management responsibilities in general, and the specific functions involved in the management of photocopying were not clearly defined. In some cases, it was evident that materiel managers were not able to devote the time and attention that the proper management of large numbers of copiers, and large volumes of copying, requires.

Definition of Needs and Requirements

4.32 Departments and agencies are fully responsible for determining their needs for photocopying services and for defining their convenience copier requirements within the range selected by DSS-Supply. We saw examples where thorough needs analyses had been done in the past with the help of DSS-Supply, but found that departments reviewed were generally not undertaking such assessments. In general, although the Photocopier Data Package sets out the steps involved in determining photocopying needs and requirements, the information bases necessary to support thorough analyses of copying needs had not been established.

4.33 Departments and agencies have several options for satisfying identified photocopying needs. The following choices can be made singly or combined:

- acquisition of equipment by rental or purchase;
- purchase of services from copy centres operated by DSS-Supply;
- purchase of copying services from the private sector; or
- sharing of equipment with other departments or other organizational units within a department.

4.34 We found that, in deciding how to satisfy photocopying needs, some departments did not adequately review the costs and benefits of alternatives, including a review of such factors as convenience, copy quality and the need for security. For example, we found instances where individuals making decisions were not aware of the costs of obtaining photocopying services from DSS-Supply or commercial copy centres. In practice, departments and agencies satisfy most of their photocopying requirements by renting or purchasing their own equipment. In November 1980, approximately 85 per cent of all photocopying was done on equipment rented or owned by departments and agencies and the bulk of the

remainder processed by the 61 copy centres that DSS-Supply operates in the National Capital Region and across Canada. Where DSS copy centres are not readily available in the National Capital Region, the Canadian Government Printing Office has arranged standing offers for the provision of copying services by the private sector.

4.35 Our survey of seven buildings outside the National Capital Region that were occupied by a number of departments and agencies indicated that there was very little sharing of equipment at the department and agency level. Similarly, we found that large organizational groups within departments also tended to act autonomously in acquiring and using convenience copiers.

4.36 *Departments and agencies should implement appropriate procedures to assess their needs for photocopying services and should evaluate alternative means for meeting identified needs.*

4.37 DSS copy centres are primarily concerned with helping departments and agencies meet high volume copying requirements. However, it was clear that departments had different perceptions of what constituted reasonable service from DSS copy centres, or had in fact experienced different levels of service. For example, we were told in some departments that they preferred to use their own equipment because the turnaround times at DSS copy centres were too long. Other departments expressed satisfaction with all aspects of service received from DSS copy centres. In this connection, we were informed that although DSS-Supply Outside Plants Branch had developed and applied service standards in the past, in some centres the standards had fallen into disuse. This has made it difficult for departments to know what level of service they could expect to receive from some DSS copy centres, and thus to analyse more objectively the relative costs and benefits of alternative means of satisfying their copying requirements.

4.38 *DSS-Supply should establish and publish service standards for their copy centres.*

Acquisition

4.39 With some notable exceptions, departments reviewed had generally opted for rental of equipment without an objective analysis of purchase as an alternate means of acquisition. To illustrate the extent of use of rented equipment, of the estimated 6,250 photocopiers in use in departments and agencies in November 1980, less than 10 per cent had been purchased.

4.40 Some departments cited cost, rapidly changing technology and expensive maintenance contracts among reasons for rejecting the purchase option. We found also that some managers were reluctant to consider purchasing photocopiers

because it is administratively easier to rent. Purchases of copiers are funded from the capital budget and normally require longer range planning and more detailed justification than do rentals, which are funded from operating budgets. It was further suggested that purchased photocopiers would place additional demands on the manager's time. For example, inventories have to be maintained for purchased copiers, but are rarely maintained for rented copiers.

4.41 We reviewed 65 rentals, and in a large number of these cases, using conservative assumptions with respect to such factors as interest rates, economic life of the equipment and accrued rental credits, our analysis suggested that it would have been more economical to purchase. Our purpose here is not to promote either purchase or rental as the most appropriate means of acquiring photocopiers, but rather to emphasize the need to make cost comparisons before determining the method of acquisition. There are clearly administrative and other constraints that departments have to take into account in arriving at their decisions, including the fact that staff time is required to do analyses of purchase versus rental. However, an awareness of the full cost implications of decisions should be a major factor in the assessment of options.

4.42 In this context, we were informed by Treasury Board that a policy is being developed to support more cost-effective acquisition of all moveable assets, including photocopying equipment, through improvements to procedures for analysing lease versus purchase alternatives. The expanded policies will provide guidance to user-managers on methodologies that could be used in making such assessments.

Controls

4.43 Most convenience copiers in departments and agencies are operated by users on an honour system. Although this is likely to be the most convenient and cost-effective approach in most cases, it makes a certain amount of misuse, abuse and waste inevitable. The following are the more common forms that these take:

- producing unnecessary copies because they might possibly be required, or as an alternative to circulating one copy where that would suffice for communication purposes;
- using convenience copiers when high speed copiers or duplicators would be more economical or vice versa;
- copying material for personal use;
- recopying to produce better print quality than is necessary; and
- wasting copies as a result of operator errors or lack of attention.

4.44 Once the acquisition of a copier has been justified and it has been acquired and put in operation, there is a tendency for its use to exceed predicted requirements. For example, a copier causing queuing problems because of its slowness may be upgraded. As users realize that more copies can be run on the new machine in the same length of time, copy volume increases. There can be a number of reasons for this, including displacing alternatives such as making carbon copies of typed material or using circulation lists to distribute information. In addition, there may be a shift in machine use with a new machine being used in preference to older, slower copiers or to sending material to copy centres. As the demand on the new machine increases, the manager may start the cycle again by further upgrading.

4.45 We did not try to estimate the extent of copier misuse during the course of our audit. We were concerned, however, with whether procedures and practices existed in departments and agencies for managing copying costs and exercising a reasonable degree of control over waste.

4.46 **User awareness.** Ultimately, copying costs must be controlled by the user. This means that the user's awareness and attitude are major factors in control. Information that would help the user to make proper decisions includes:

- the cost per copy of using convenience copiers and high-speed equipment, or alternatively, the monthly costs of operation;
- the ranges for numbers of originals and copies per original beyond which high-speed, rather than convenience, copiers should be used; and
- the location of the nearest high-speed copier (either in-house or at other copy centres) and procedures for processing work there.

4.47 In many departments, signs were posted near photocopiers indicating rules for copier use and the location of alternatives. However, we found no information posted on the cost per copy or total operating costs. Similarly, there was little evidence of efforts to increase the cost consciousness of employees through awareness campaigns or the issue of notices outlining the costs of photocopying and sound user practices to help control costs.

4.48 **Key operators.** In its *Photocopier Data Package*, DSS-Supply recommends designating a "key operator" for each machine. This practice is also supported by equipment suppliers, most of whom provide free training courses for them. Responsibilities of key operators normally include ensuring that supplies are on hand and equipment is operating properly, correcting minor operating problems, and acting as a liaison between the department and equipment suppliers for maintenance and repairs. DSS-Supply maintains a "Service Hotline" that key operators can call if suppliers are not providing the required level of service. In addition, key operators may keep a record of production volumes and forward

performance data to equipment managers. Posting the name, telephone number and work station of key operators at copier locations means that they can be easily contacted by users should operational problems arise.

4.49 A key operator system was in place in all departments reviewed, although we noted some instances where operators had not been named or had not been trained. A number of departments had formally assigned key operator responsibilities through a department-wide directive.

4.50 In the majority of departments reviewed, the names of key operators were not posted at convenience copier sites, and few instructions had been posted on what steps were to be taken in the event of machine failure. In these circumstances, users are left to diagnose any equipment problems they may encounter. A frequent reaction is to take no action at all except to seek an alternative copier for processing the work. Some users resort to trial and error, which can actually result in further damage to the machine. The point is that something better can be done than the sign we found posted on one machine suggesting "If machine won't start hit it here!"

4.51 **Control over access.** In the departments reviewed, control over access to copiers was generally adequate. We found that consideration had usually been given to locating convenience copiers away from entrance ways as a means of controlling unauthorized access, and locks had been installed in a number of cases to prevent after-hours use of the machines. In some departments, control devices such as access cards were being used.

4.52 **Verification of invoices.** Where equipment is rented, monthly invoices are submitted by suppliers, based, among other things, on the copy volume for the month invoiced. These volumes are usually based on meter readings, either reported by departmental staff or recorded by suppliers' representatives. However, we found instances where the meters were not read over long periods of time and invoices were based on estimated volumes.

4.53 In processing an invoice for payment, certification must be made under Section 27 of the Financial Administration Act, attesting that services and supplies have been satisfactorily provided. In the case of invoices for photocopier rentals, where part of the amount billed is based on copy volume, a means must exist for verifying that copy volumes billed are correct. Our review indicated many instances where copy volume information was not available or not used for verification of invoices.

4.54 **Management of address and distribution lists.** As one indication of control over copy volume, we reviewed procedures adopted by certain departmental units to keep distribution lists up to date. These were the units responsible for distributing press clippings, information bulletins, news releases

and so on. We found that the units generally had adopted, or were planning to adopt, systematic means for maintaining the currency of distribution lists.

4.55 Guidelines. We found that the degree of attention given to managing photocopying and controlling copying costs varied widely among departments and even among organizational units within departments. Some departments had developed documented procedures for the management of copiers, but in others we found a piecemeal approach had been taken.

4.56 The DSS-Supply Data Package focuses mainly on the acquisition of convenience copying equipment and is, in effect, a price catalogue. There is only a very brief section dealing with in-service management of convenience copiers, which, if expanded, would provide a useful basis for departments to develop procedures and practices suited to their specific requirements. For example, information on the management of high-speed copiers is not included, and some managers still tend to depend solely on suppliers to help them determine equipment capacities, best location, whether operators are needed or not, and so on.

4.57 *Departments and agencies should develop and implement appropriate, realistic procedures and practices for the economic and efficient use of copying equipment and services.*

Information

4.58 The government's administrative restraint program has focused on photocopiers, among other types of equipment. Treasury Board had not, however, obtained the information required to monitor its restraint policy in relation to photocopying. As in other policy areas, Treasury Board will be relying on internal audits by departments to monitor adherence to its policies on the management of office equipment and supplies. In this context, the Treasury Board Secretariat has developed audit questions on all aspects of its materiel management policies for possible inclusion in departmental audit programs. In addition, the Office of the Comptroller General of Canada has acted as a catalyst to the establishment of an interdepartmental committee which is updating an audit handbook that will expand on these questions.

4.59 Economic and efficient materiel management in departments and agencies depends, in large measure, on the availability of timely, relevant and reliable information. In the case of photocopying, it could reasonably be expected that managers, in order to achieve due regard for economy and efficiency, would need at least the following information on a regular basis:

- number and location of machines owned or rented (including models, contract numbers, terms, rates and expiry dates);

- production volumes;
- costs of operation; and
- volume and costs of purchased copying services.

The Treasury Board's Management Improvement Circular 4-68 specifically requires departments to maintain logs for use in performance analysis. Chapter 235 of the Administrative Policy Manual suggests that departments may also wish to consider maintaining data on "annual expenditures for purchases, the degree of shared equipment and the cost of rental equipment."

4.60 Within the departments reviewed, we found that information necessary for making well founded decisions on alternative ways of acquiring copying equipment or services and for controlling the use of equipment did not always exist. In most cases there were no systems that allowed equipment utilization, copy volumes and costs to be consistently monitored even where such information was readily available from suppliers' invoices. In a number of departments information on equipment inventories and performance was incomplete. Even where systems were in place and some information was available, regular analysis of such performance indicators as equipment utilization, cost per copy or number of copies was not being carried out.

4.61 We believe that the lack of adequate information and the failure to use available information for monitoring performance reflects a widely held view that photocopying is a mundane matter and a trivial expense which does not warrant consistent management attention. However, the costs of photocopying are not trivial and inadequate monitoring and control increases the potential for waste.

4.62 *Departments and agencies should gather and use information at the appropriate management levels to support the economic acquisition and efficient use of photocopying equipment and services. This should include inventories of owned and rented photocopiers, as well as information on copy volumes and costs.*

4.63 At the time of our audit, Treasury Board was in the process of strengthening materiel utilization policies to include consumption control. These control procedures will be designed to allow departments and agencies to detect possible waste and under-utilization and to take necessary corrective action.

GOVERNMENT INITIATIVE FOR IMPROVED MANAGEMENT PRACTICES

GOVERNMENT INITIATIVE FOR IMPROVED MANAGEMENT PRACTICES

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GOVERNMENT INITIATIVE FOR IMPROVED MANAGEMENT PRACTICES

Introduction

5.1 This chapter is our second report on the monitoring of the Office of the Comptroller General's Improvement in Management Practices and Controls (IMPAC) initiative in government departments and agencies. The monitoring of the IMPAC process and its progress is carried out in accordance with the request of the Public Accounts Committee.

5.2 IMPAC was designed to identify the current state of management practices in departments and agencies, to support the development of individual departmental Action Plans for improvement of existing practices, and to follow through with the implementation of these plans. This is a large undertaking, initially involving 30 departments and agencies that account for about 85 per cent of government expenditures (excluding Public Debt) and about 300,000 person-years.

5.3 This chapter covers our monitoring of 18 IMPAC Action Plans approved as of 31 March 1981. We defined our IMPAC review process in Chapter 4 of our 1980 Report; our work is designed to provide the House of Commons with an independent, on-going review of the progress of IMPAC.

5.4 Since our 1980 Report, the Office of the Comptroller General (OCG) has been formulating and issuing internal policy guidelines regarding the IMPAC process. The policy guidelines formalize the approach to IMPAC described in our 1980 Report and are summarized below. There are three broad stages in the process.

5.5 Stage I involves the preparation of an IMPAC Survey Report by the OCG that outlines the state of the management practices at the time of the survey and identifies the improvements required to meet a standard of management practice agreed to by the Comptroller General and the deputy head. The objective is to bring about benefits in the organization that outweigh the cost of the improvement effort. Improvements required are determined in the areas of Planning, Organizing and Implementing, Controlling, Financial Administration, Internal Audit, Program Evaluation, and other areas which may be added to reflect better the needs of the organization surveyed.

5.6 Stage II involves the development of an Action Plan by the department that spells out how the surveyed organization will implement agreed improvements. The Comptroller General and the appropriate deputy head jointly endorse the Action Plan. Agreement between the department and the OCG on the Action

Plan is indicated by formal communications between the Comptroller General and the deputy head. The communications will also state, when appropriate, the implementation resource assistance to be provided to the department.

5.7 Stage III involves the implementation of the Action Plan by the department and monitoring by the OCG.

5.8 The Management Practices Branch of the Office of the Comptroller General has prime responsibility for overall direction and monitoring of IMPAC. Assistance is provided by two other branches: the Policy Development Branch, responsible for Internal Audit, and the Program Evaluation Branch.

Scope of Review

5.9 Our monitoring of the IMPAC process in 1981 covered the following matters:

- Office of the Comptroller General - IMPAC role: a review of the processes as defined and utilized by the Office of the Comptroller General to implement and monitor IMPAC.
- Previous Audit Observations: a review of the IMPAC response to previous audit observations and recommendations of this Office for all 18 Approved Action Plans.
- IMPAC Process for Operational Improvements: a full review covering approach to achieve change, contents of Action Plans, and the implementation process for the organizations subject to comprehensive audit in 1981 that had approved Action Plans (Royal Canadian Mounted Police, Post Office, Correctional Service of Canada, Consumer and Corporate Affairs Canada). Revenue Canada, Customs and Excise was also reviewed.
- Follow-up on other matters in our 1980 Report: a review of departmental and Office of the Comptroller General responses to our observations regarding IMPAC in the 1980 Report.

Summary of Observations

5.10 Exhibit 5.1 outlines the progress of the 30 government entities participating in IMPAC. Progress has been made by the Office of the Comptroller General in expanding IMPAC. Of the 30 organizations, 18 had Approved Action Plans as of 31 March 1981, compared with the 6 organizations reported in our 1980 Report. Six had draft Action Plans in the process of approval, five had draft Action Plans under development and one was in the Survey Stage.

GOVERNMENT INITIATIVE FOR IMPROVED MANAGEMENT PRACTICES

STATUS OF ACTION PLANS - 31 MARCH 1981

DEPARTMENTS AND AGENCIES	1978				1979				1980				1981				Time in Process (Months)	Action Plan Completion Dates
	September October November December	January February March April May June July August September October November December	January February March April May June July August September October November December	January February March April May														
ACTION PLANS APPROVED																		
1. National Health and Welfare																	15	Mar/83
2. RCMP																	15	Feb/84
3. Energy Mines and Resources																	16	Mar/83
4. DSS-Services																	16	Mar/82
* 5. Employment and Immigration																	17	May/81
6. Agriculture																	17	Mar/83
7. Public Works																	20	Mar/84
8. Environment																	23	Jun/85
9. Veterans Affairs																	27	Mar/82
10. CIDA																	27	Dec/85
11. Post Office																	28	Aug/84
12. Customs and Excise																	27	Oct/84
13. DSS-Supply																	30	Dec/81
14. DREE																	30	Dec/83
15. Correctional Service																	28	Dec/85
16. National Revenue - Taxation																	29	Apr/84
17. Consumer and Corporate Aff.																	19	Mar/84
18. Canadian Transport Comm.																	20	Jun/83
DRAFT PLANS IN PROCESS OF APPROVAL																		
19. National Defence																	(30)	
20. National Museums																	(18)	
21. Labour																	(19)	
22. Secretary of State																	(25)	
23. Industry Trade and Commerce																	(29)	
24. Indian Aff. and Northern Dev.																	(30)	
DRAFT PLANS UNDER DEVELOPMENT																		
25. Transport																	(30)	
26. Statistics Canada																	(20)	
27. External Affairs																	(23)	
28. Justice																	(17)	
29. Fisheries and Oceans																	(14)	
IN SURVEY STAGE																		
30. Treasury Board																	(6)	
* Excludes Benefit and Overpayment System																		
IMPAC Action Plan Development and Approval Process																		
<div><div><div></div><div></div><div></div><div></div></div><div>Survey Stage Action Plan Development Action Plan Received by OCG Action Plan Review and Approval</div></div> <div><div></div><div>Process incomplete: circled number is the number of months in process to 31 March 1981</div></div> <div><div></div><div>Process ongoing</div></div>																		

5.11 From our review of the IMPAC process, we ascertained that no provision has been made by the OCG for the formal evaluation and documentation of the achievement of IMPAC objectives. We believe that it is essential that evaluation procedures be in place to determine whether the agreed Action Plans have corrected deficiencies or achieved the agreed objectives.

5.12 We reported in 1980 that the implementation of IMPAC within departments and agencies had been slower than planned; this is still true. At the time of our review, delays in meeting planned milestones had occurred in approximately 20 per cent of the IMPAC tasks within the Action Plans, even though many of the Plans had been revised. The scope and complexity of IMPAC, combined with changing departmental organizational structures or the difficulty in obtaining adequate departmental staff resources to implement IMPAC have been among the contributing factors. The Action Plan projects experiencing delays were mainly in the areas of Planning, Management Information Systems and Program Evaluation.

5.13 The Comptroller General, when approving the IMPAC and Implementation Assistance Programs for departments and agencies, requested that organizations monitor resource utilization and significant benefits achieved as a result of IMPAC. In our 1980 Report, we also reported on the need for OCG guidelines for standard reporting of Action Plan costs and benefits. Our review in 1981 generally did not find evidence of potential benefits being identified either at the Action Plan approval stage or subsequently during the Plan's implementation. Guidelines had been drafted at the time of our review for the recording of costs and benefits, but were not yet in use.

5.14 Although the project management and monitoring procedures carried out by the IMPAC liaison officers and staff of the OCG generally followed their stated practices, we found that improvements could still be made. In particular, attention should be given to improving the reporting of Action Plan progress. Within departments, attention should be directed to improving the standards of project management and status reporting, which varies in approach and quality from department to department.

5.15 Our review of the 18 approved Action Plans indicated that they addressed previous audit observations made by our Office. The full review this year of five departments found that the Action Plans approved had given adequate attention to plan content and management.

5.16 Since our last report, IMPAC coverage of government organizations, as evidenced by approved Action Plans, has increased from 7 to 18. Given the complexity and the long time periods involved in the IMPAC programs, the major challenge for the Office of the Comptroller General will be to maintain the momentum of departmental commitment to the IMPAC process.

Office of the Comptroller General - IMPAC Role

5.17 Scope of review. To achieve improvements in management practices and control in an economic and efficient manner, sound project management is required. Government departments and agencies are responsible for implementing their approved Action Plans and the Office of the Comptroller General is responsible for monitoring the implementation. We undertook an examination of the IMPAC process in the Office of the Comptroller General, involving interviews with staff and a review of the IMPAC project management practices and documents.

5.18 Observations. Subsequent to our comments in our 1980 Report on the informality of project management processes and the need for their further development, monitoring processes have been documented by the Office of the Comptroller General.

5.19 A key process in the Comptroller General's IMPAC follow-up procedure is the "IMPAC Anniversary Meeting" held with entities with approved Action Plans. It was planned that, on or about the annual anniversary of the Action Plan approval date, a meeting would be held with departments to review progress and future plans, to encourage the staffs of departments in their commitment to IMPAC, to cause departments to examine and comment on progress and to demonstrate the commitment of the Comptroller General to helping the department and its IMPAC program. Of the seven departments with Action Plans approved prior to April 1980, two meetings have been delayed with no future date set. The remaining five have had their meetings, but after delays ranging from two to seven months from the anniversary date. Various explanations were given for such delays, including lack of Comptroller General staff resources, difficulties in arranging meetings, absence of appropriate Office of the Comptroller General and/or departmental senior management staff, and revision of Action Plans. Delays in holding Anniversary Meetings could be detrimental to the purpose of this monitoring process and could adversely affect the department's commitment to and momentum of the Action Plans.

5.20 The Office of the Comptroller General has been allocated resources to supplement departmental IMPAC efforts. To date, \$14 million has been allocated to 11 departments in amounts ranging from \$0.4 to \$3.5 million. We found reasonable control procedures in place for the Implementation Assistance Program (IAP). A condition of IAP is that departments report annually "with a detailed assessment of past and projected resource utilization and benefits derived therefrom."

5.21 At the time of our review, there were no standard requirements for such reporting or for the methodology to be used to define costs or benefits. The lack of such guidelines for the use of IMPAC participants has resulted in the reported estimated costs of IMPAC being calculated in an inconsistent manner. For example, some departments have only included the salary costs of additional

staff required for IMPAC, while others have included the salaries of all staff involved in IMPAC, whether existing or additional. It was also noted that the inclusion of administrative overhead costs was not applied in a consistent manner. Guidelines are currently being prepared, are in draft form and expected to be finalized by the end of 1981.

5.22 OCG liaison officers, through contacts with departments and in accordance with the agreed monitoring milestones, maintain status reports. Our review of this monitoring process indicated that, although the framework for an adequate system existed, its execution needed to be improved. At the time of our review, status reports were inadequate to provide explanations of project delays, auditable trails of IMPAC progress, records of decisions affecting Action Plans, and evidence of follow-up actions resulting from previous status reports. It was also noted that the OCG had not provided departments with guidelines for reporting progress.

5.23 The majority of IMPAC programs are in their early stages of development or implementation. We stated in our 1980 Report that it was important that the IMPAC process include appropriate procedures to determine whether matters agreed as being deficient or requiring improvement had been dealt with or improved as planned. From this year's review of the IMPAC process, we ascertained that only limited provision had been made by departments for a formal evaluation of the achievement of IMPAC objectives and benefits from completed IMPAC projects. This is important as a means of demonstrating that the IMPAC program is contributing to departmental objectives.

IMPAC Response to Previous Audit Observations

5.24 Scope of review. We examined the 18 approved Action Plans to determine whether the plans responded to our previous audit observations and recommendations. For each of the IMPAC entities, we compiled our observations and recommendations made for the period 1975 to 1981 or from the most recent comprehensive audit. Observations and recommendations that, in our view, were not addressed were then identified and compared to the projects contained in the Action Plans.

5.25 Observations. We ascertained that most of our outstanding observations and recommendations were either covered by the Action Plans or by improvement projects initiated by the entity, outside IMPAC. It must be stated at this point in time that coverage by IMPAC does not, in itself, assure that the problem identified will be corrected.

IMPAC Process for Operational Improvements

Framework for Change

5.26 Scope of review. A major factor in achieving change and operational improvement is management's commitment to IMPAC. To determine whether a formal commitment had been made to IMPAC and was supported by an organizational structure for implementation, we examined the structures and processes established within each department. Our review started with interviews with the OCG liaison officers and IMPAC representatives of the five departments in which we conducted a full review. Our reviews covered resource commitment to IMPAC; management communication of departmental involvement in IMPAC; examination of IMPAC management committee minutes; and the organizational structure formally established to implement and monitor IMPAC.

5.27 Observations. The magnitude and complexity of the program being undertaken should not be underestimated. The implementation programs of the 18 entities with approved Action Plans involve some 430 major projects comprising some 2,400 tasks at an estimated cost, as reported in the approved Action Plans, of some \$110 million. The estimated time required to complete IMPAC for these 18 organizations involves a period from late 1978 to 1985.

5.28 As the entities have proceeded further into the IMPAC process, it has become apparent that many of the original surveys and Action Plans require revision. Such revisions have involved redefining the Action Plan because of the unforeseen complexity of the program, and rescheduling of project milestone dates because of improved knowledge of project time requirements or delays due to the difficulty of obtaining appropriate staffing. Of the six departments whose Action Plans were reviewed in the IMPAC chapter of our 1980 Report, four have made or were making major revisions to their plans.

5.29 With programs that are of a long-term nature, there are many factors that may affect their progress. These may include:

- central agency administrative policies, such as The Policy and Expenditure Management System (PEMS), that may require incorporation into the IMPAC Action Plans;
- organizational changes within a department that may affect the planned progress of IMPAC;
- program staff changes within the Office of the Comptroller General and entity organizations that may affect the level of expertise available for the implementation and orderly continuity of the IMPAC program; and
- availability of appropriate staff in departments to implement IMPAC projects.

Such factors were causing difficulties in maintaining the momentum of some IMPAC programs. For IMPAC to be successful, a continuing commitment by department management to the IMPAC process is essential. Our review has identified IMPAC programs where management and organizational changes have contributed to a prolonged implementation period and hence possible delays in the realization of management improvements.

5.30 With the constant pressures on government organizations to do the same or more for less, management is being challenged to decide where to apply resources. Thus, a major task facing managers is to rank program expenditures in order of priority, taking into account both tangible and intangible benefits. There was only limited evidence that the expected benefits of the IMPAC program had been documented either prior to approval of the IMPAC Action Plan or as implemented. The articulation of benefits from IMPAC should aid in maintaining a long-term commitment to the IMPAC program, particularly when management is faced with competing demands for resources.

Contents of IMPAC Action Plans

5.31 In our review of the contents of the IMPAC plans for the five departments (RCMP, Post Office, Correctional Service of Canada, Consumer and Corporate Affairs and Customs and Excise) subject to full review, we considered the following aspects of the plans.

5.32 IMPAC attention to underlying causes. IMPAC projects, which, in many cases, have a very broad scope, were reasonably addressing the underlying causes of problems. In some cases, departments decided during the implementation of agreed Action Plans that the original IMPAC plan projects could be improved. In such cases, the Action Plan or the particular project within the Action Plan has been revised.

5.33 Priorities in the IMPAC plan. Generally, we found that setting priorities for IMPAC projects was an informal process that took into account such matters as the inter-relationship of projects and the availability of resources. In some cases, the results of the project planning were displayed on critical path charts to aid in planning and testing the viability of the scheduling of IMPAC projects. However, identifying individual IMPAC project costs and benefits, whenever practical, will aid management in setting priorities and making decisions. Although the results of priority setting appeared to be reasonable, there were no guidelines or formal processes for establishing such priorities. Guidelines would normally be expected as a part of good project management practices.

5.34 Timing of IMPAC tasks. The timing estimates for projects have been determined by departments in a subjective manner based largely on experience. Timing considerations will require further work; IMPAC Action Plans are 2 to 21 months behind schedule. Project timing estimates that are overly optimistic and

out of line with actual requirements also raise doubt about the quality of the IMPAC planning and final completion dates of the Action Plans, thus creating a question of confidence in the Action Plans.

IMPAC Implementation Process

5.35 Our review of the implementation process in the five departments subject to full review covered three aspects of the process.

5.36 Interim requirements. In a program such as IMPAC, with project times spread over periods from 1978 to 1985, opportunities may arise to implement interim improvements before achievement of the full planned result. From our interviews we concluded that consideration had been given to implementation of interim improvements in preparing Action Plans.

5.37 Progress against milestones. We have been concerned about the ability of Action Plans to meet their indicated milestones. The plans under review were recently approved, but already there have been delays in meeting milestones.

5.38 The major areas of progress slippage were the Planning, Management Information Systems, and Program Evaluation components of the Action Plans. Departmental representatives told us that the reasons for slippage were:

- unanticipated delays in starting up the Action Plan programs due to staffing requirements and/or organizational changes;
- the complexity of the processes under review, requiring amendments to plans as the problems were further examined; and
- other demands on senior managers' time, competing with their need to participate in the IMPAC decision-making process.

5.39 For example, our review of the Consumer and Corporate Affairs Action Plan indicated that progress had slowed because recent departmental organizational changes caused delays in key decisions affecting the Action Plan. Similarly, the RCMP Action Plan was revised and broadened, resulting in a revised plan completion target date 15 months later than originally anticipated. At Customs and Excise, some planned project milestone dates have been revised by one to two months, but management expressed confidence that the revisions would not affect the total IMPAC program completion dates.

5.40 Having established across five departments that delays in progress were general, we extended our review of progress to all 18 departments. We found that, as of 31 May 1981, about 20 per cent of the tasks were behind

schedule, excluding one department that was involved in a major revision of its Action Plan, and therefore had not established revised tasks and milestone dates. These delays occurred subsequent to six departments revising their Action Plans during the year. The need for these revisions throws doubt on the possibility of completing the IMPAC plans as originally scheduled. We have not attempted to assess the implications of such delays on resource requirements and final completion dates of the Action Plans.

5.41 Project management of IMPAC. Although we found that the project management processes and status reporting methods for IMPAC as practiced by the departments varied, the IMPAC plans were formal documents with stated project objectives, responsibilities were indicated and acknowledged, resource requirements were costed and scheduled and progress milestones and completion dates were documented. Such processes have helped the Office of the Comptroller General and departments to identify areas in the implementation of IMPAC requiring attention and/or corrective action.

5.42 In regard to project management, the following matters require further attention:

- monitoring costs and benefits, as requested by the Office of the Comptroller General;
- providing for the review of completed projects to evaluate whether they have met the original objectives as stated in the IMPAC program; and
- establishment of IMPAC project management and status reporting guidelines by the Office of the Comptroller General for use by departments.

Follow-up on Other Matters in our 1980 IMPAC Report

5.43 In our 1980 Report, we commented that the Office of the Comptroller General had "not extended IMPAC to many boards, commissions, agencies and Crown corporations that also use public funds."

5.44 An Office of the Comptroller General policy statement effective 1 December 1980 indicated that further government entities would be covered by IMPAC. This would result in a coverage of entities representing approximately 99 per cent of person-years and 97 per cent of planned government expenditures (excluding public debt) based on 1980-81 Estimates. In October 1980, the OCG began an IMPAC survey of such an entity, the Treasury Board Secretariat. Depending on the availability of OCG resources, these additional entities would include such organizations as the National Research Council, Department of

Communications, National Energy Board, Canadian Radio-television and Telecommunications Commission, the Agricultural Stabilization Board and the Northern Pipeline Agency.

5.45 Our 1980 Report noted that the Canada Employment and Immigration Commission was preparing a workplan for improvements to the Unemployment Insurance benefits system in regard to overpayments and underpayments. This workplan was to be prepared for inclusion in the Commission's preliminary approved IMPAC Action Plan. During the current year, considerable effort has been devoted to completing the workplan for improving the benefit and overpayment system. A draft of the workplan was submitted to the OCG and received agreement in principle on the objectives, planned approach and specific steps required to improve the control over the benefit payments. The Commission requested of the Treasury Board additional resources to implement this program. Approval for some resources was received during 1981. At September 1981, the Commission was in the process of revising the workplan in line with resources available for allocation to these initiatives.

5.46 We also stated in 1980 that payroll costs management issues, which are an integral part of management practices and controls, were not incorporated into IMPAC. These issues include human resource planning, training, and human resource information systems. In our opinion, this is a significant weakness in the IMPAC program, and it has not been addressed since our 1980 Report.

5.47 In 1980, when we reviewed the Action Plans of six departments, we observed that the Energy Sector activities of the Energy, Mines and Resources Action Plan were not on schedule. Our follow-up review in 1981 indicated that this was still a matter for concern. We also noted that the IMPAC program for the Department had been revised but had not been approved.

CANADIAN RADIO-TELEVISION AND TELECOMMUNICATIONS COMMISSION

CANADIAN RADIO-TELEVISION AND TELECOMMUNICATIONS COMMISSION

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CANADIAN RADIO-TELEVISION AND TELECOMMUNICATIONS COMMISSION

The Commission

Role

6.1 The Canadian Radio-television and Telecommunications Commission (CRTC) was established in 1976 as the successor to the Canadian Radio-Television Commission that had been set up in 1968. The Canadian Radio-television and Telecommunications Act (*S.C. 1974-75-76, c. 49*) assigns regulatory responsibility to the CRTC for all federally regulated telecommunications carriers and broadcasting undertakings in Canada. The responsibilities of the CRTC are set forth mainly in the Broadcasting Act, the National Transportation Act, and the Railway Act.

6.2 In the field of broadcasting, the CRTC's main objective, as stated in the 1980-81 Estimates, is to develop and implement the national broadcasting policy. This objective has five sub-objectives:

- to ensure that the Canadian broadcasting system is effectively owned and controlled by Canadians so as to safeguard, enrich and strengthen the cultural, political, social and economic fabric of Canada;
- to ensure the development of high standards of varied and comprehensive programming with the maximum use of Canadian artistic, cultural and technical resources consistent with these standards;
- to ensure that reasonable and balanced opportunity is provided for the expression of differing views on matters of public concern;
- to provide for the extension of the broadcasting services to all parts of Canada in the two official languages; and
- to be responsive and adaptive to scientific and technical advances in the field of broadcasting and associated phenomena.

6.3 In the area of telecommunications, the following objectives arise from the Railway Act and are stated in CRTC's 1979-80 annual report:

- to ensure that all tolls (including any rates or charges to be charged to the public or to any person for telecommunications services) are just and reasonable; and

- to ensure that the carriers under its jurisdiction do not discriminate unjustly in respect of their rates, services or facilities.

Resources

6.4 In 1980-81, the CRTC was granted \$17.7 million to carry out its program. This amount was allocated as follows:

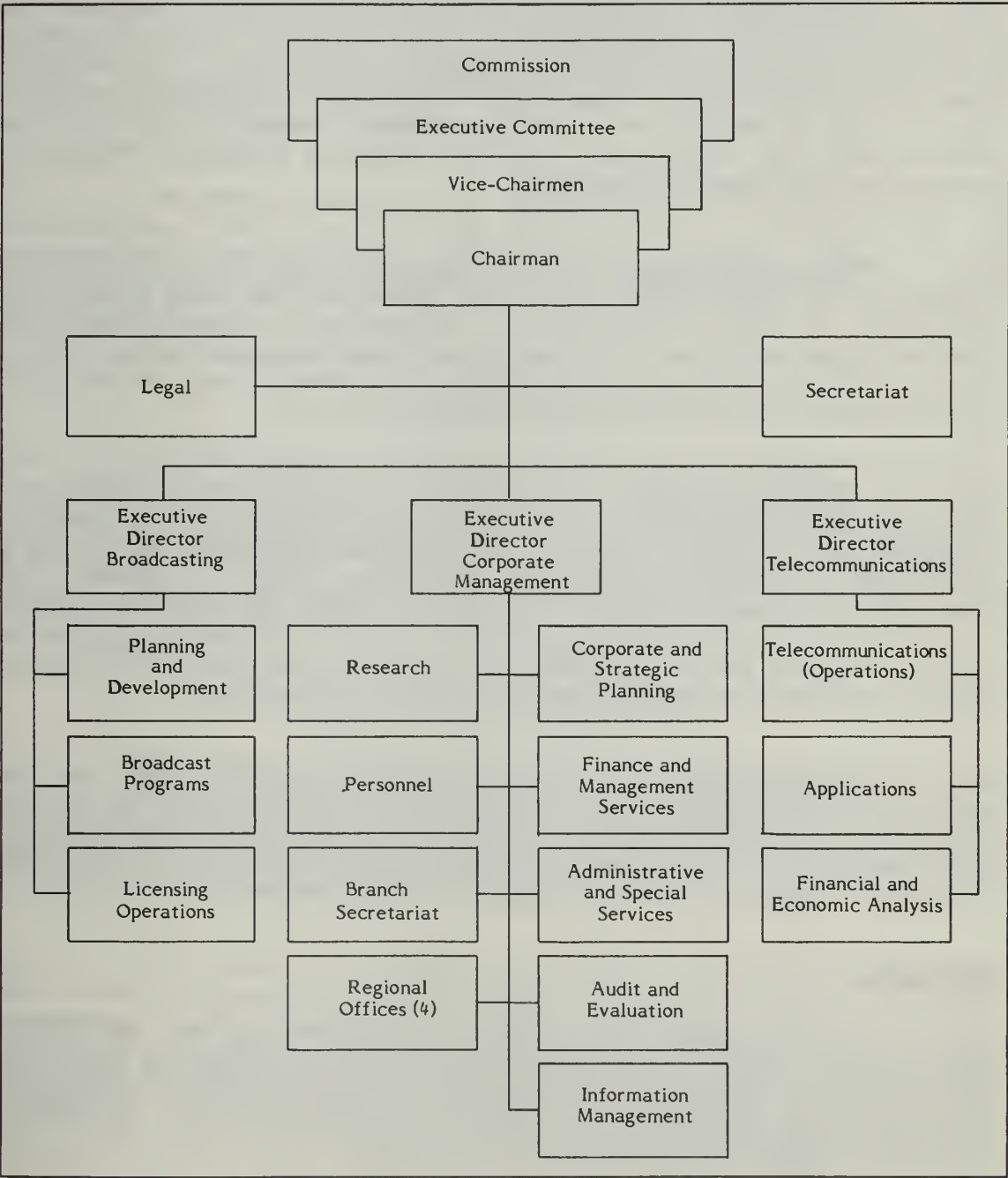
	Budget (thousands of dollars)		Person-years	
Broadcasting	\$ 8,978	51%	214	50%
Telecommunications	1,785	10	52	12
Administration	<u>6,921</u>	<u>39</u>	<u>165</u>	<u>38</u>
Sub-total	17,684	<u>100%</u>	<u>431</u>	<u>100%</u>
Add				
Accommodation and other services provided without charge by other departments	<u>1,838</u>			
Total cost of program	19,522			
Less				
Receipts from broadcasting and cable TV licence fees	<u>15,500</u>			
Net cost of program	<u>\$ 4,022</u>			

Organization

6.5 The CRTC is organized in terms of its activities, as indicated in Exhibit 6.1, and is headed by the Commission and its Executive Committee, as specified in the Canadian Radio-television and Telecommunications Commission Act. The Commission is composed of a maximum of 19 members, 9 full-time and 10 part-time. Appointed by the Governor in Council for maximum seven-year terms, the Executive Committee members are the Chairman, two Vice-Chairmen and six full-time Commissioners. The 10 part-time members are drawn from all regions of Canada and are appointed for terms of up to 5 years. It is only after consultation with the part-time members that the CRTC may, through its Executive Committee, issue, renew, amend or revoke the licences of radio, television and cable television companies.

6.6 The Chairman is the chief executive officer of the Commission, presiding at meetings of the Commission and providing general direction of the Commission's work.

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6.7 Corporate Management. The Executive Director, Corporate Management, reports to the Chairman and is responsible for all corporate and strategic planning. He is Chairman of the Senior Management Committee, composed of the three Executive Directors, the Secretary General and the General Counsel. In this capacity, he recommends on policy development and on alternative ways to achieve the CRTC's goals and objectives. Reporting to him are eight directorates and the regional offices.

6.8 Broadcasting. The Executive Director, Broadcasting, reports directly to the Chairman and is a member of the Senior Management Committee. She advises the Commission on the development of Commission broadcasting policies and regulations, objectives, priorities, programs and goals, as well as on operational broadcasting matters. She is also responsible for translating these into action to meet the requirements of the Commission. Reporting to her are three divisions within the Directorate: Broadcast Programs, Broadcast Planning and Development, and Licencing Operations.

6.9 Telecommunications. The Executive Director, Telecommunications, reports directly to the Chairman and is a member of the Senior Management Committee. He assists the Commission in discharging its responsibilities for the effective regulation of the telecommunications companies under federal jurisdiction, in accordance with the provisions of various statutes, including the CRTC Act, the Railway Act and the National Transportation Act.

6.10 Secretary General. The Secretary General to the Commission is responsible to the Chairman for planning the proceedings of the Executive Committee and Commission meetings, for registration, scheduling and control of broadcasting and telecommunications applications, and for planning and scheduling the Commission's public hearings. He is also responsible for administering, controlling and co-ordinating the preparation of all broadcasting notices and decisions, and for the co-ordination and the promulgation of Commission policies, regulations and telecommunications orders and decisions.

6.11 General Counsel. The General Counsel is responsible to the Chairman for all matters relating to the interpretation and implementation of the acts concerned, the regulations made thereunder, and related federal and provincial legislation. He also conducts questioning during public hearings and is responsible for legal proceedings instituted by or against the Commission.

Environment

6.12 For the purposes of the Financial Administration Act, the CRTC is designated as a department and reports to Parliament through the Minister of Communications. The Department of Communications is responsible for technical certification and assignment of the frequency spectrum for the granting of licences for broadcasting undertakings by the CRTC.

6.13 Broadcasting. Under the Broadcasting Act, the CRTC regulates approximately 3,000 broadcasting enterprises, including AM and FM radio, television and cable television.

6.14 Telecommunications. On 1 April 1976, the CRTC Act assigned to the Commission the jurisdiction, formerly assigned to the Canadian Transport Commission, to approve all tariffs of tolls, rates and charges, and all interconnecting agreements of certain telecommunications carriers. These carriers include Bell Canada, BC Telephone Company, CN Telecommunications, CP Telecommunications, Northwest Telecommunications, Telesat Canada and Terra Nova Telecommunications. Other major carrier undertakings in Canada, except Teleglobe Canada, which reports directly to the Minister of Communications, come under provincial government regulation.

6.15 Technological developments. Rapid technological development in the communications field, such as cable television and pay television and the increased use of communications satellites, has an important influence on the broadcasting and telecommunications system and requires the CRTC to develop new regulations.

Audit Scope

6.16 Because of the importance given by the CRTC to regulatory activities concerning broadcasting, we paid particular attention to the process for evaluating applications and monitoring procedures. In addition, because of the importance of the Commission's decisions on telecommunications, we examined the tariff approval mechanism. Our audit also covered the processes in place for planning, program evaluation, financial management and the internal audit function.

Summary of Audit Observations

6.17 The Canadian Radio-television and Telecommunications Commission's mandate is to regulate and supervise the Canadian broadcasting system which is composed of private and public radio, television and cable television undertakings. Since 1976, it has also had the responsibility for regulating telecommunications carriers under federal jurisdiction.

6.18 CRTC operates in a highly technological environment and its regulatory mandate requires it to make decisions that greatly affect the future development of the broadcasting and telecommunications systems in Canada. Accordingly, planning activities designed to identify needs, issues and possible solutions are of prime importance for the development of appropriate regulations and policies. Our examination of the Commission's planning activities revealed that, during 1980-81, the CRTC had taken significant steps to improve its planning capacity. However, further work is required to complete its planning, both at the strategic and operational levels.

6.19 Our examination of the procedures used to measure and report on program effectiveness revealed that the CRTC had developed many indicators and conducted many effectiveness-related studies in cases where it was appropriate and reasonable to do so. In general, we found these to be satisfactory. However, we did not find any overall program evaluation policy or plan for future effectiveness studies.

6.20 One of the CRTC's important activities in the broadcasting field is the processing of licence applications. In our examination of the applications evaluation process, we found weaknesses in the planning, organization and control of the analysts' work. However, the procedures followed when holding public hearings for the assessment of applications were satisfactory.

6.21 To ensure compliance with its regulations and policies, the CRTC monitors broadcasting enterprises. We noted that the monitoring of regulations applying to all enterprises, such as regulations for Canadian content of television programming, Canadian ownership and control of enterprises and advertising, was generally adequate. However, monitoring of the programming of each station, for which the CRTC requires a Promise of Performance, was insufficient.

6.22 In the telecommunications field, the CRTC's main role is to approve just and reasonable rates. To do so, it assesses various applications filed by carriers. We noted that the CRTC generally performed the analyses with competence and rigour, given available analytical tools and resources. The assessment process, however, could be improved by completing the Inquiry into Telecommunications Carriers Costing and Accounting Procedures, developing a better understanding of mathematical models used by the carriers, and conducting a more detailed evaluation of the carriers' construction programs.

6.23 The examination of the financial management function revealed that, in general, financial controls were satisfactory. We believe, however, that budget preparation should be better related to operational plans.

6.24 Regarding internal audit, we are of the opinion that the Audit Committee should play a more active role in approving internal audit plans and in ensuring that appropriate and timely action is taken on audit findings.

Observations and Recommendations

Planning and Research

6.25 The nature of the CRTC's regulatory mandate requires it to make decisions that greatly affect the future development of the broadcasting and telecommunications system in Canada. Accordingly, the identification and assessment of events likely to influence this development, as well as a forecast of

the possible consequences of such events, are of prime importance for those who must make the decisions. We examined the planning process and the contribution of research to this process.

6.26 Planning process. Responsibility for the CRTC's strategic planning lies with the Executive Director, Corporate Management. Since October 1980, he has been assisted in this task by a Senior Adviser on Strategic and Corporate Planning who is responsible for, among other things, developing and implementing the CRTC's strategic plan.

6.27 An integrated system of strategic and operational plans is essential in order for an agency with the powers of the CRTC to know and evaluate the immediate and long-term consequences of its many individual decisions and of its policies and regulations on the quantity and quality of services provided and on the technological evolution of broadcasting and telecommunications infrastructures in Canada.

6.28 During 1980-81, the CRTC had prepared a strategic overview as required by the Treasury Board's new Policy and Expenditure Management System. This document described the environment in which the CRTC operates and the CRTC's role, objectives and priorities. This was a good starting point for developing a strategic plan. However, we found no other document specifying in more detail the method to be used to achieve its objectives, the time frames or an estimate of required resources. Such a document could include research projects in broadcasting and telecommunications.

6.29 At the operational level, the CRTC prepares a schedule of public hearings and program forecasts as required by Treasury Board. The schedule of public hearings is based on the expected number of applications that will be filed with the CRTC the following year and on the policies that the Commission wishes to discuss during the year. The schedule is an essential element of the planning process and covers a period of 6 to 12 months. It includes deadlines for the preparation of public hearings and is communicated to all directors.

6.30 With respect to program forecasts, the CRTC started, during our audit, to develop operational plans showing the activities and the resources required to carry them out. However, we found no guidelines from senior management to help in establishing these annual operational plans.

6.31 *The CRTC should complete its strategic plan and senior management should formulate guidelines to enable managers to establish annual operational plans in accordance with the strategic plan.*

6.32 Research. The research carried out by the CRTC under its mandate is designed to enable the Commission to gain a better understanding of the social, cultural, economic and technological developments in the environment in which it operates and to develop new ways for the CRTC to exercise its regulatory powers in the future. Accordingly, there is a need for the research program to be integrated with the CRTC's overall planning process to ensure compatibility between the Commission's general objectives and the objectives of its research activities, thus ensuring that research results will contribute to meeting the Commission's needs and facilitating timely provision of the research information required.

6.33 Since December 1980, the Research Branch has been part of the Corporate Management Directorate. A research program involving about 10 projects has been developed under the authority of the Director General, Research. A group of about 15 persons is assigned to co-ordinate and carry out the projects. We examined the way in which these projects were integrated with the planning process.

6.34 The terms of reference of the program and the criteria for evaluating the projects were clearly defined and documented; in general, the projects in the research program conformed to the terms of reference. However, since the CRTC did not have a well-defined strategic plan, it was difficult for us to determine how closely the objectives of the various projects, including the time frames, were integrated with the CRTC's overall objectives.

6.35 *The CRTC should ensure that the work of the Research Branch, as well as the expected results of the projects in the research program, are integrated into the strategic planning process.*

6.36 Over the past few years, the Telecommunications Directorate has worked on an "Inquiry into Telecommunications Carriers' Costing and Accounting Procedures", the Cost Inquiry. This study, which began in 1972 under the direction of the Canadian Transport Commission, is a major applied research project in the area of regulation. The study has so far addressed several major aspects of costing and accounting procedures; Phase I has dealt with "Accounting and Financial Matters" and Phase II with the "Information Requirements for New Service Tariff Filings". During our audit, we noted that the CRTC has, for the time being, relaxed its efforts on the Cost Inquiry and has not always carried out a follow-up of the requirements laid down in the first phases of the Study.

6.37 One of the most important regulatory activities of the CRTC with regard to telecommunications carriers is processing applications for general rate increases. Most of the hearings dealing with applications for general rate increases involve rates for competitive services, and the increasing number of such services has an impact on many aspects of telecommunications regulations including, in some cases, the need to revise them. Moreover, in the current

inflationary economy, applications for general rate increases are becoming more and more frequent. This imposes on CRTC additional burdens, leaving little time to evaluate the regulations or to undertake research, such as the Cost Inquiry, in this area. In view of the fact that Phase III of the Cost Inquiry is planned as an examination of all the costing aspects (and thus the rate implications) of competitive services, it becomes important that this phase be scheduled as soon as possible.

6.38 *The CRTC should pursue the Cost Inquiry study and review present methods for regulating telecommunications carriers.*

Program Evaluation

6.39 The CRTC's objectives are of a social, cultural and economic nature. On the one hand, the broadcasting policy set out in section 3 of the Broadcasting Act is intended to preserve the social and cultural identity of Canada in the face of foreign influence. On the other hand, the CRTC's responsibilities in the area of telecommunications require it to make decisions that, in spite of their economic nature, also have social repercussions; for example, the equity of rates for services among various groups of consumers, among the telecommunications carriers themselves and between the two groups.

6.40 Some of the effects of the decisions made by the CRTC are felt immediately; most, however, are noticed in the medium and long term, especially in the social and cultural areas. Moreover, in most cases, the observable effects are not attributable solely to earlier decisions, since a number of factors, such as level of economic activity, introduction of new technology and changes in the public's attitude, intervene between the time a decision is made and the time its effect can be observed and measured. All these factors must be taken into account in evaluating the effectiveness of the CRTC's regulatory program. In each sector subject to regulation, we examined the:

- definition of objectives;
- procedures used to measure effectiveness; and
- procedures used to report on effectiveness.

6.41 **Definition of objectives - broadcasting.** The CRTC's broadcasting objectives are set out in the Broadcasting Act. We examined each of these objectives to determine whether it was defined in a way that permitted measurement.

6.42 We found that objectives relating to Canadian ownership and control, the right to broadcasting service in both official languages, the use of Canadian resources and the development and viability of the broadcasting system were defined in such a way that they could be measured. Objectives relating to the

responsibility of broadcasters toward the public, the adaptation of regulations to scientific and technical progress, the quality of programming and the safeguarding, enrichment and strengthening of the fabric of Canada have, where appropriate and reasonable, been operationally defined in a satisfactory manner by the use of means such as public hearings, research or identification of issues.

6.43 Definition of objectives - telecommunications. The CRTC's mandate in the area of telecommunications is to approve just and reasonable rates for the services provided by telecommunications carriers and to ensure that there is no unjust discrimination. The Commission also rules on applications dealing with specific services, interconnections and issues of common equity.

6.44 To determine whether the rates applied for are just and reasonable and whether there is any unjust discrimination, the CRTC considers, among others, the following factors:

- attracting capital at reasonable terms;
- provision of services to subscribers at reasonable rates;
- quality of service; and
- economy and efficiency of services and equipment.

6.45 A more precise definition of these factors is found in the Commission's decisions.

6.46 Procedures used to measure effectiveness. The CRTC measures the effectiveness of its regulations and policies by using a set of indicators as well as various studies dealing, among other things, with effectiveness. Certain objectives, such as those related to the right to freedom of expression and the expression of differing views on matters of public concern, are usually examined at public hearings.

6.47 In the field of broadcasting, we examined procedures to measure achievement of the objectives relating to Canadian ownership and control, the right to broadcasting service, programming, and the expansion and viability of the broadcasting system. In the field of telecommunications, we examined procedures to evaluate the four factors mentioned in the preceding section; we have dealt with them in our analysis of the regulatory process for telecommunications.

6.48 Canadian ownership and control. A CRTC study on ownership in private broadcasting analysed ownership concentration in 1975 and the effects of this concentration on the behaviour and performance of the broadcasting companies. Our examination of the study revealed that the methodology and statistical tools used were satisfactory.

6.49 Right to broadcasting service. The "Special Report on Broadcasting in Canada" examined the development of the broadcasting system since the proclamation of the Broadcasting Act in 1968. The study was based on indicators such as the percentage of the population served by public and private television and radio networks, the number of channels available, and access to foreign stations. We examined the reliability and validity of these indicators and concluded that they were satisfactory.

6.50 Programming - variety. The CRTC has defined program categories and requires from broadcasters a Promise of Performance, indicating the type and length of programs the station plans to air. Each radio and television station must provide data on the amount of time devoted to each program category. In this way, the Commission is able to assess the programming provided to the public. We believe these measures are satisfactory.

6.51 Programming - use of Canadian resources. The "Special Report on Broadcasting in Canada" and other studies have analysed the Canadian content policy. These studies have dealt mainly with the number of stations not complying with minimum standards and the percentage of the audience tuned to Canadian programs at various times of the day. In this regard, we consider that these studies have been well conducted. The CRTC is currently doing work with a view to reviewing its entire Canadian content policy.

6.52 Expansion and viability. The financial data that the CRTC gathers from radio and television stations allow it to develop financial indicators and analyse the financial situation of each enterprise. These indicators also make it possible for the Commissioners to evaluate the viability and the rate of return of undertakings. We examined the main indicators used, and believe that the information they provide is useful for evaluating the Commission's objectives in these areas.

6.53 Procedures to report on effectiveness. Information Services prepares a number of statistical reports on the broadcasting and telecommunications system. These statistics come from internal sources and from external sources such as Statistics Canada and the Bureau of Broadcast Measurement. Information is grouped according to the various types of broadcasting and telecommunications companies.

6.54 Our examination of the procedures to measure and report on program effectiveness showed that, where it was reasonable and appropriate to measure effectiveness, the procedures were generally satisfactory. However, these measures were fragmented and were not part of an overall plan or a general policy on effectiveness evaluation. Such a policy and overall plan are now required by the Office of the Comptroller General in its Guide on the Program Evaluation Function.

6.55 *The CRTC should develop a policy on program evaluation in accordance with the Office of the Comptroller General's guide and integrate existing measures into an overall plan of evaluation.*

The Regulatory Process: Broadcasting

6.56 In our audit, we examined:

- the process for evaluating applications to obtain, renew or amend licences;
- the extent and quality of monitoring compliance with various broadcasting regulations;
- procedures to be followed for holding public hearings; and
- the handling of enquiries and complaints from the public.

6.57 **The process for evaluating applications to obtain, renew or amend licences.** Each year, the CRTC receives roughly 2,000 applications, 80 per cent of which are for licence amendments and renewals; 20 per cent are for new licences. More than half of all the applications involve cable television. Applications are made in accordance with the procedural rules developed and made public in the document, "CRTC Rules of Procedure".

6.58 Applicants must fill out forms prescribed by the CRTC. If an application is considered incomplete, a letter is sent to the licensee indicating what is missing; this step inevitably delays study of the file. The forms in current use are essentially the same as those used since the start of operations in 1968. A revision of these forms and a better description of the supporting documents which must accompany applications would reduce the number of incomplete applications and shorten processing time.

6.59 When an application is duly completed, each of the branches carries out a detailed analysis. The scope and thoroughness of the analysis depends on whether the application is scheduled as an "appearing" or "non-appearing" item on the agenda of the public hearing. An application is said to be "appearing" if the Commission has decided that it must hear testimony before rendering a final decision. In the case of a "non-appearing" application, the Commission renders its decisions without hearing any testimony.

6.60 For "appearing" applications, a Factum Book is prepared, outlining the background of the station and the results of the analyses carried out by the various branches. About 20 per cent of applications are appearing; the rest are non-appearing. We analysed the scope and thoroughness of the analyses performed for the two types of application by interviewing the analysts and reviewing the documents related to a public hearing.

6.61 We judged acceptable the scope and quality of the analyses carried out for "appearing" applications. However, the roles and responsibilities of the branches were not defined clearly, resulting in duplication of effort. The licensing analyst must complete the file, but has no direct authority over analysts' work in the other branches. This creates a co-ordination problem.

6.62 We also analysed in detail the content of the CRTC's official files for a number of "non-appearing" applications on the agenda of a public hearing and found no matters of significance to Parliament.

6.63 Our analysis of the process used for evaluating both types of applications revealed that it took a great deal of time to evaluate and process applications. For example, we found that, on average, slightly more than a year elapsed between the time an application was filed and the time a decision was published for a new licence; almost a year elapsed for a licence renewal. The average time for analysing an application and making a decision has been steadily increasing in the past three years, and the number of outstanding applications has more than doubled in five years. These figures are contained in 1980 internal reports prepared for the CRTC's Executive Committee.

6.64 Many of our observations are corroborated by the findings of a study done by outside specialists, commissioned by the CRTC, that had already identified these shortcomings. A task force was established to study and implement the report's major recommendations.

6.65 *The CRTC should review the management systems and methods used by the Broadcasting Service for processing applications with a view to reducing the time required to complete the processing of each application.*

6.66 **Scope and quality of monitoring the application of broadcasting regulations.** A distinction must be made between two types of monitoring: monitoring regulations applying to all broadcasting enterprises, and monitoring of each station to ensure that it adheres to its Promise of Performance.

6.67 The first type of monitoring relates to such matters as Canadian content of television programming, Canadian ownership and control of undertakings, permissible advertising, policies on FM radio and so on. This type of monitoring deals with application of the regulations issued by the CRTC to ensure compliance with the Broadcasting Act. The CRTC has developed quantitative standards to regulate the industry. We believe that the CRTC has exercised adequate supervision in this area.

6.68 The second type of monitoring applies to individual stations and is intended to ensure that stations adhere to their licence conditions. For example,

since one of the aims of the Broadcasting Act is to ensure varied, comprehensive and high-quality programming, the CRTC requires programming objectives (Promises of Performance) for each station.

6.69 In the case of FM radio, this Promise of Performance is one of the conditions on which the licence is obtained, and it cannot be amended without permission from the CRTC. In AM radio, the Promise of Performance is not a condition for licensing; it can be amended without the CRTC's permission. The Commission is reviewing its radio policy, and this review includes an assessment of the role of the Promise of Performance.

6.70 Television stations also have Promises of Performance which deal with programming. There are no Promises of Performance for cable television because of the nature of this medium.

6.71 We studied the scope and quality of the monitoring of individual stations and made the following observations:

- There was no mechanism for continuously monitoring the Promise of Performance. During the licence renewal process, a check on programming is supposed to be done; however, this was not done systematically.
- In practice, the complaints received took the place of a monitoring process. The CRTC receives approximately 100 complaints a week, dealing mainly with the quality of programs. Although this is a form of control, we do not think that this method can replace a mechanism for monitoring compliance with the Promise of Performance.
- The cases where a licence was cancelled or not renewed for non-compliance with the conditions of the licence were infrequent (no cancellations in the last five years).

6.72 Since there are approximately 2,500 radio and television stations and more than 500 cable television undertakings operating in Canada in 1981, and the number is growing by approximately 200 each year, we think it is important that the CRTC reassess the effectiveness of its regulating and monitoring procedures.

6.73 *The CRTC should review its monitoring procedures relating to the Promise of Performance to determine which monitoring mechanisms are most effective and establish appropriate methods for reporting results of monitoring.*

6.74 **Processing inquiries and complaints from the public.** Complaints from the public can be sent to a regional office, to CRTC headquarters or directly to

the licensee in question. In addition, the public can make its views known in writing or appear at a CRTC public hearing. Most of the complaints are telephone calls dealing with the quality of programs on radio, TV or cable. The Correspondence Branch of the CRTC controls the processing of complaints and ensures that each complaint is studied. We found that controls over complaints were satisfactory.

The Regulatory Process: Telecommunications

6.75 During our audit, we examined:

- procedures for assessing applications;
- scope and quality of the monitoring done to ensure compliance with the Commission's decisions and orders;
- processing of inquiries and complaints from the public; and
- procedures for holding public hearings.

6.76 **Procedures for assessing applications.** In carrying out its duties, the Commission holds public hearings and/or issues orders to approve, question or otherwise decide on the applications that have been received.

6.77 The Commission receives approximately 600 applications annually, of which 75 per cent are applications for approval of new or amended tariff pages. The applications are filed according to the rules published in "CRTC Telecommunications: Rules of Procedure". We audited the evaluation process for this category of applications. We also examined the processing of applications for general rate increases because of the importance the decisions made have for the public and because of the amount of effort devoted by the CRTC to their processing.

6.78 **Applications for approval of new or amended tariff pages.** In 1978, the CRTC issued internal directives prescribing the various steps in analysing these applications. The directives list the various documents that the applicants must present, the internal distribution list for these documents and the criteria for assessing the application.

6.79 If the application is for a new service, the applicant must provide the CRTC with an economic evaluation study of this service in accordance with Telecom Decision CRTC 79-16. This applies to approximately 10 per cent of the applications. This requirement is the first step toward rationalization of decision making concerning rates for new services.

6.80 The Commission also requires that the companies include with their economic evaluation studies a plan for monitoring and tracking rates and all the major elements of demand, revenues, resource quantities and related costs that may significantly affect the study results. At the time of our audit, the requirement to provide this documentation was just being implemented, and applicants were not yet complying with it in all cases. In general, however, we found that the procedures for evaluating applications for approval of new or amended tariff pages were satisfactory.

6.81 Applications for general rate increases. When such an application is received, a study group is set up under a Director General or other senior staff member. This group includes individuals from several administrative branches - operations, financial and technical analysis, legal and others. The study group analyses the applications and interventions received, prepares the questioning which precedes the hearings and suggests questions which the Commission might ask at the public hearings.

6.82 Public hearings are held at the regional level in addition to general hearings. During these hearings, the study group assists the Commission in its work. The proceedings of a public hearing resemble court proceedings in that they include questioning, cross-examination, witnesses, evidence and legal counsel. The decision made by the Commission is thus of a quasi-judicial nature. In effect, the Commission decides on the application after hearing the evidence and arguments presented by the various parties involved.

6.83 In order to obtain an understanding of the evaluation process in these cases, we examined Telecom Decision CRTC 81-3 and Telecom Decisions CRTC 78-7 and 80-14.

6.84 Analysis of such applications and the general hearing deal with the following matters:

- accessibility and quality of service;
- construction program;
- expenditures and revenue requirements;
- rate of return; and
- the analysis of the proposed tariff.

Our observations deal with these aspects of the evaluation process.

6.85 General rate increase - accessibility and quality of service. In the past few years, the Commission has become increasingly concerned with the

quality of services provided by the applicants, based on the opinion that just and reasonable rates are an inherent characteristic of a service of acceptable quality.

6.86 In Telecom Decision CRTC 78-7, the Commission stated that:

indicators of service quality must provide quantitative measures of all significant aspects of interaction between a telephone company and its customers that can be examined over time, applied to the different serving areas of the Company, compared with appropriate industry standards, and employed in the determination of whether the rates requested for the services offered are just and reasonable.

6.87 In Telecom Decision CRTC 81-3, the Commission went further and, for the first time, directly associated the quality of service with the authorized rate of return, stipulating that:

the Commission is not authorizing an annual return on common equity in excess of 14 per cent unless service quality exceeds the minimum level acceptable to the Commission, having regard to the indicators and standards used in this case and, where appropriate, those resulting from the quality of service proceeding.

6.88 In July 1979, the Commission appointed the Director General of Telecommunications (Operations) to make recommendations on suitable quality indicators and standards to be used for comparison purposes. The proposed indicators included, among others, the percentage of installation and repair appointments kept and the percentage of total accounts issued without adjustment.

6.89 The first report showed that, in the case of several service quality indicators, no standard for comparison existed and, in other cases, a carrier's existing standards had been used without any certainty that these standards met the Commission's requirements.

6.90 *The CRTC should ensure that, to the maximum extent practicable, suitable standards and service quality indicators are developed for all telecommunications carriers.*

6.91 In examining Telecom Decision CRTC 81-3, we found that CRTC's audit procedures did not assure completeness of the data provided by the applicant and did not adequately guarantee the validity and reliability of the data provided on the quality of service. It is essential that the Commission be able to rely on the data which it receives concerning the quality of service. The CRTC does not yet have a method of analysis to check the data provided.

6.92 *The CRTC should develop an approach to enable it to check the data on the quality of service provided by the companies.*

6.93 **General rate increase - construction program.** During the public hearings, a great deal of time is spent on the question of construction programs, first because of the size of the various companies' construction programs and second because of the way these programs could affect both the companies' revenue requirements and the determining of rates needed to generate revenues.

6.94 The justification of these overall capital expenditures is complex and highly technical and, at a public hearing, it is difficult to discuss technical and economic questions in detail. Consequently, the CRTC has set up a standing committee to review annually the construction programs of the various carriers. These reviews should result in a better understanding and permit better discussion during future public hearings. At the time of our audit, a review of construction programs had already been initiated.

6.95 To determine the size of construction program projects, carriers use mathematical models that specify equipment requirements in terms of variables such as traffic expected, standards of service quality and so on. A better understanding of models like these would enable the Commission to improve its analytical process by determining:

- the validity of the models used and the underlying analytical methodology; and
- the accuracy of the data used concerning volume of traffic, service quality and other variables.

The construction program review process has already involved a substantial amount of analysis, particularly in regard to the measures of utilization and demand estimation. The CRTC is planning to do more analysis of the engineering planning model, subject to the availability of resources.

6.96 **General rate increase - expenditures and revenue requirements.** The Commission must decide on the validity of the revenue requirement forecasts as submitted by the operating companies. Operating expenses, including depreciation, generally represent the greatest part of the revenue requirement. The forecast of operating expenses is an estimate of the expenses of the company required to meet the forecast demand for services, taking into account anticipated productivity and price changes.

6.97 We examined the Commission's evaluation process in Telecom Decisions CRTC 78-7 and 80-14 to assess the reasonableness of the forecasts of operating expenditures submitted to support applications.

6.98 The Commission considers that it would be to the benefit of both the company and the hearing process if certain key indicators were employed that would permit greater comparability of performance among the companies. Accordingly, the Commission has started the process for selecting indicators that would enable such comparison and assessment.

6.99 General rate increase – rate of return. It is generally recognized that there is more than one way to determine the accuracy of the rate of return. In the final analysis, the rate of return on common equity that is required by investors is the result of the combined opinions of many security analysts, portfolio managers and individual investors at a given moment, in the context of prevailing market conditions. The Commission's decision, therefore, consists of authorizing a rate of return that, in its opinion, will allow the company to obtain the necessary capital at a reasonable cost and offer quality services. To do so, the Commission studies the company's capital structure, hears various experts' testimony, and analyses prevailing capital market conditions. We concluded that these measures were satisfactory.

6.100 Tariff revisions. To determine whether the proposed rates for specific services are just and reasonable involves an assessment of how the additional revenues required should be distributed among the company's services. For example, proposed tariffs are analysed for basic services, residential and commercial, competitive services, long-distance services, and hotel and hospital rates.

6.101 In Decision CRTC Telecom 78-7, the Commission commented that this task was complicated by the lack of detail available with respect to revenue forecasts for the services provided. Since then, various measures have been taken to obtain more details on the methods used to estimate revenues from the various services. The Commission intends to study in greater depth the appropriate costing and pricing of services in future phases of the Cost Inquiry. As mentioned earlier, this Cost Inquiry constitutes a major project in applied regulatory research and, in our opinion, should be pursued without delay.

6.102 Handling inquiries and complaints from the public. Complaints from the public may be sent to a regional office, to CRTC headquarters, (where approximately 2,500 complaints are received each year), or directly to the company in question.

6.103 Before replying to complaints, the CRTC asks the company concerned for its side of the story and then sees that users receive proper answers.

6.104 The number of complaints received directly by the companies is communicated to CRTC in a report on service quality indicators. This report gives the number of complaints per 100,000 accounts.

6.105 On request, the CRTC may receive a much more detailed report, grouping complaints by category, region or other characteristics providing an indication of the nature of the complaints and the accuracy and quality of the answers given. However, this report is required only at the time of a general rate increase, which means that two to three years may elapse between these reports.

6.106 *The CRTC should ask for and analyse on an annual basis detailed reports of complaints made directly to the companies.*

Financial Management and Control

6.107 The Executive Director of Corporate Management is the senior financial officer of the CRTC. He is directly responsible to the Chairman of the Commission and acts as chairman of the Senior Management Committee. As the senior financial officer, he is in charge of budget preparation, accounting and budgetary control for the whole of the CRTC. He is assisted in his work by the Director General of Finance and Management Services.

6.108 For the purposes of financial management, the CRTC is divided into six responsibility centres which correspond to its organizational structure: executive, broadcasting, telecommunications, corporate management, secretariat and legal. Administrative assistants, who report functionally to the senior financial officer, assist in the financial management of each of the responsibility centres.

6.109 During our audit, we studied the financial management function, including internal controls and the budgeting process.

6.110 We concluded that financial management and control were generally satisfactory. We noted, however, that there is room for improvement in the budgeting area.

6.111 **Budgeting.** The preparation of budgets for operating expense, except for salaries and wages, was mainly centred around planned public hearings and the projects that senior management considers to have priority.

6.112 For salaries and wages, which represent approximately 70 per cent of CRTC's expenditure, there was no link with planned activities, and senior management did not provide those responsible for preparing the budget with guidelines to link the budget and the annual operational plans.

6.113 However, during our audit, the CRTC started to take into account its planned activities to forecast resources requirements.

6.114 It is essential that guidelines, taking into account the organization's objectives and operational plans, be established by senior management to ensure that resources requirements correspond with planned activities.

6.115 *Senior management should formulate guidelines to enable managers to establish budgets corresponding to the operational plans.*

Internal Audit

6.116 The role of the internal audit group is to conduct comprehensive reviews and analyses of CRTC systems in order to evaluate the systems components, including the related procedures and practices. The group consists of a director and two audit managers. Outside staff is called upon when a particular skill is required.

6.117 During our audit, we undertook a comprehensive examination of the internal audit function and have reported thereon to the CRTC. Our most significant observations are detailed in the following paragraphs.

6.118 **Audit Committee.** According to the CRTC audit policy, the Audit Committee role is to advise the Chairman, establish audit policies, and serve as the forum for discussing findings and solutions to problems raised in audit reports from internal and external auditors. The Committee consists of three members, including the Chairman of the Commission.

6.119 We noted that, at the time of our audit, the Audit Committee had not met since December 1978. Since then, the Committee has met and plans to meet quarterly.

6.120 The audit committee helps to reinforce the independent and objective nature of the internal audit by reviewing internal audit plans and ensuring that action is taken on audit findings.

6.121 *The Audit Committee should play an active role in approving internal audit plans and ensuring that appropriate and timely action is taken on audit findings.*

6.122 **Performing the audit.** The internal audit group carried out audits that dealt mainly with the economy and efficiency of CRTC operations.

6.123 However, the CRTC did not have its own audit manual defining the standards that auditors should meet, nor did it have a guide for the performance

of audits on economy, efficiency and procedures for measuring effectiveness. In addition, no suitable standards in this area had been developed. The CRTC has, however, adopted the Treasury Board's Standards on Internal Financial Audit that include general standards that can apply to any kind of audit.

6.124 The following observations led us to conclude that these general standards were not always being followed:

- The objectives and scope of certain audit projects were not set out clearly at the beginning of the audit.
- A time budget for each audit project was not established, and the actual time spent on the project was not controlled.
- There was no evidence that the audit work was supervised, that the audit files were reviewed or that the quality of the work done was controlled.
- Audit aids, such as audit programs and internal control questionnaires, were not always used.
- Existing controls were not always assessed before determining the nature, extent and timing of tests to be done.

6.125 *The Director of Internal Audit should adopt current Office of the Comptroller General's audit standards and ensure that these standards are adhered to.*

6.126 **Audit reports and follow-up.** The Audit Committee did not receive any summary reports of activities, specifying, among other things, the cases where the internal audit findings were not followed up adequately. Such a report would make it possible to obtain support from the Audit Committee and would encourage managers to find solutions to the problems raised. Since our audit, a summary report on the 1980-1981 audit activities has been presented to the Committee.

6.127 *The Director of Internal Audit should present an annual summary report of activities, specifying, among other things, the cases where his findings have not been followed up adequately.*

Information for Parliament

6.128 The Office of the Comptroller General of Canada has undertaken a government-wide study to improve the information provided in the Estimates and the Public Accounts. The CRTC has made changes in its 1981-82 budget in this regard. For instance, activities have been re-defined to describe CRTC

operations better. We believe there is a need for additional information in the CRTC Estimates that would enable Members of Parliament to gain a better understanding of the requirements for funds and give the CRTC an opportunity to explain variances between results and forecasts.

6.129 CRTC's objectives, current policy issues (for example, pay television) and operational plans should be described briefly in the Main Estimates. In addition, the dates when reports are expected to be ready should be published.

6.130 For licence applications processing, the CRTC should indicate in the Main Estimates the number of applications it expects to receive from the broadcasting and telecommunications sectors. This information and the number of outstanding applications at the beginning of the year would help explain the level of resources requested. Members of Parliament may also be interested in the average time required to process each category of licence application.

6.131 These suggestions, and other information about the operations of CRTC, should be considered for inclusion in the CRTC Estimates when they are revised.

Summary of Recommendations and CRTC's Comments

Recommendations

CRTC's Comments

Planning and Research

6.31 The CRTC should complete its strategic plan and senior management should formulate guidelines to enable managers to establish annual operational plans in accordance with the strategic plan.

Agreed. The Public Hearing process and Licence Renewal process do lend themselves to planning. However, it has to be recognized that, as a quasi-judicial body, the CRTC must to a considerable extent react to applications put before it. A strategic plan for 1982-83 and supporting operational plan have been completed and forwarded to the Ministry of State for Social Development.

6.35 The CRTC should ensure that the work of the Research Branch, as well as the expected results of the projects in the research program, are integrated into the strategic planning process.

The work program of the Research Branch is currently being reviewed with a view to integrating it into the strategic planning process for 1982-83.

6.38 The CRTC should pursue the Cost Inquiry study and review present methods for regulating telecommunications carriers.

Agreed. The next phase of the Cost Inquiry will be scheduled as soon as possible, depending on the availability of resources.

Program Evaluation

6.55 The CRTC should develop a policy on program evaluation in accordance with the Office of the Comptroller General's guide and integrate existing measures into an overall plan of evaluation.

Agreed. A formal program evaluation plan is currently being negotiated with the Office of the Comptroller General.

Recommendations

CRTC's Comments

The Regulatory Process: Broadcasting

6.65 The CRTC should review the management systems and methods used by the Broadcasting Service for processing applications with a view to reducing the time required to complete the processing of each application.

Proposals to modify our licence procedures are being studied and it is our plan that they be implemented in 1982-83.

6.73 The CRTC should review its monitoring procedures relating to the Promise of Performance to determine which monitoring mechanisms are most effective and establish appropriate methods for reporting results of monitoring.

The CRTC intends to review its monitoring procedures for 1982-83. At present the Commission monitors compliance with the Canadian content regulations and monitors as a result of complaints.

**The Regulatory Process:
Telecommunications**

6.90 The CRTC should ensure that, to the maximum extent practicable, suitable standards and service quality indicators are developed for all telecommunications carriers.

Agreed. The Commission has recently distributed new draft guidelines for comment and expects to implement these changes in fiscal year 1982-83.

6.92 The CRTC should develop an approach to enable it to check the data on the quality of service provided by the companies.

Agreed, as an objective within the limits of available resources.

6.106 The CRTC should ask for and analyse on an annual basis detailed reports of complaints made directly to the companies.

Agreed. This will be implemented in fiscal year 1982-83.

Recommendations

CRTC's Comments

Financial Management and Control

- 6.115 Senior management should formulate guidelines to enable managers to establish budgets corresponding to the operational plans.

Agreed. Will be implemented in fiscal year 1982-83 to the extent possible.

Internal Audit

- 6.121 The Audit Committee should play an active role in approving internal audit plans and ensuring that appropriate and timely action is taken on audit findings.

Agreed. Has been implemented.

- 6.125 The Director of Internal Audit should adopt current Office of the Comptroller General's audit standards and ensure that these standards are adhered to.

Agreed. The CRTC will adopt the standards currently being developed by the Office of the Comptroller General.

- 6.127 The Director of Internal Audit should present an annual summary report of activities, specifying, among other things, the cases where his findings have not been followed up adequately.

Agreed. Has been implemented.

DEPARTMENT OF CONSUMER AND CORPORATE AFFAIRS

DEPARTMENT OF CONSUMER AND CORPORATE AFFAIRS

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DEPARTMENT OF CONSUMER AND CORPORATE AFFAIRS

The Department

Background

7.1 The Department of Consumer and Corporate Affairs (CCA) was established in 1967 by the Consumer and Corporate Affairs Act (now *R.S.C. 1970, c. C-27*). Under the Act, various programs governing and regulating the marketplace were brought together from the Departments of Justice; Health and Welfare; Agriculture; and Industry, Trade and Commerce. In addition, all the functions of the Department of the Registrar General were transferred to Consumer and Corporate Affairs.

7.2 The objective of CCA, as set out in the 1980-81 Estimates, is "to promote the integrity and viability of the market system in Canada." CCA is the only department in the federal government with a specific mandate to represent the interests of consumers. The Estimates also state four sub-objectives of the Department:

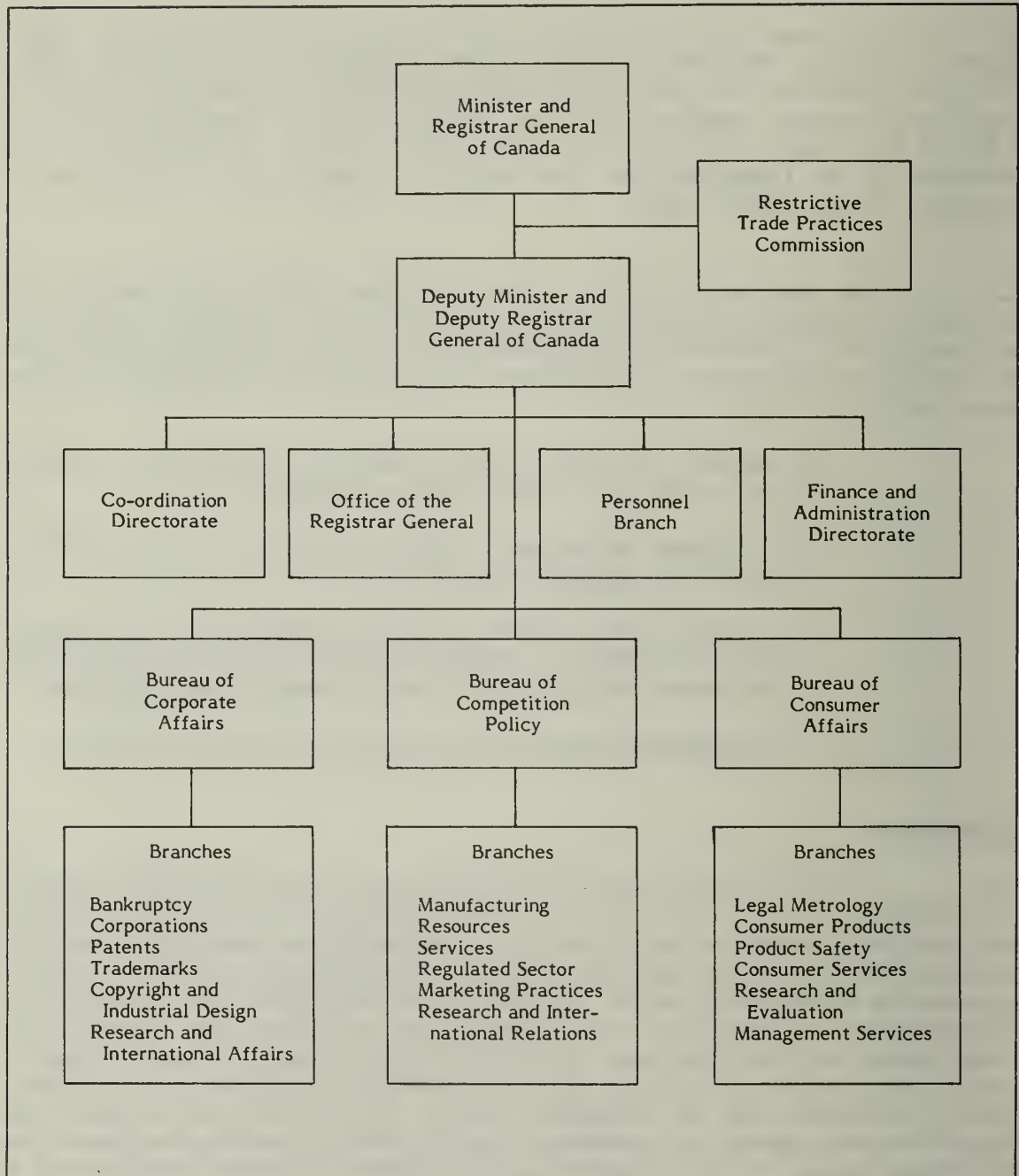
- to protect and promote the interest of consumers by working toward a fair, safe and efficient marketplace;
- to facilitate the orderly conduct of business and the private development and production of capital;
- to maintain free and open competitive conditions in the market economy, to eliminate certain practices in restraint of trade and afford protection against false and misleading advertising; and
- to encourage innovation by protecting the rights of inventors.

Organization

7.3 The Department is made up of three major operating Bureaux: Corporate Affairs, Competition Policy, and Consumer Affairs. Each Bureau is divided into branches, as set out in Exhibit 7.1. Reflecting the development of the Department from formerly separate functions, several units are headed by persons appointed by Governor in Council: the Director of Investigation and Research, the Superintendent of Bankruptcy, the Commissioner of Patents and Registrar of Trade Marks, and the Registrar of Copyright and Industrial Design. Support services are provided by the Co-ordination Directorate, the Finance and Administration Directorate and the Personnel Branch. At the time of our audit, the Department was planning to establish a Bureau of Policy Co-ordination to assume the responsibilities of the Co-ordination Directorate and other functions of a departmental nature.

DEPARTMENT OF CONSUMER AND CORPORATE AFFAIRS

SUMMARY ORGANIZATION CHART - 31 MARCH 1981



7.4 In addition, the Department includes the Office of the Registrar General which is divided into the Conflict of Interest unit, responsible for implementing major aspects of government policy on conflict of interest, and the Registration Division, responsible for registering and issuing commissions and documents under the Public Officers and Seals Act.

7.5 The Restrictive Trade Practices Commission is an independent agency which authorizes formal evidence gathering by the Director of Investigation and Research (ADM, Bureau of Competition Policy) for inquiries under the Combines Investigation Act. The Commission also receives statements of evidence from the Director of Investigation and Research, holds hearings and reports its findings and recommendations to the Minister of Consumer and Corporate Affairs and to the public.

7.6 Bureau of Corporate Affairs. The Bureau of Corporate Affairs is made up of six branches, reporting to the Assistant Deputy Minister for Corporate Affairs. The Superintendent of Bankruptcy, who is also the Director of the Bankruptcy Branch, is responsible for the overall administration of the bankruptcy system in Canada, including the supervision of private sector trustees in bankruptcy.

7.7 The Corporation Branch administers the Canada Business Corporations Act (CBCA) and other federal corporation laws, which provide a framework for the organization and conduct of business activity through the corporate structure. In addition, the Branch is responsible for the protection of investors and creditors through the enforcement of statutory disclosure requirements, and the dissemination to the public of corporate information filed with the Branch, such as financial statements, inside shareholder trading reports and corporate takeover bids.

7.8 The intellectual property branches, which are Patents, Trade Marks and Copyright and Industrial Design, examine and grant patent rights and register trade marks, copyrights and industrial designs upon application. The Research and International Affairs Branch is responsible for legislative revision, including the associated economic and legal research, in the intellectual property and national corporate legislation areas. The Research and International Affairs Branch also monitors and participates in various international intellectual property conventions.

7.9 Except for the Bankruptcy Branch, which operates in offices throughout Canada, the majority of Bureau staff is located at the Department's head office in Hull.

7.10 Bureau of Competition Policy. The provisions of the Combines Investigation Act are applied by the Director of Investigation and Research, the Restrictive Trade Practices Commission (RTPC) and the courts. The Act seeks to

eliminate certain practices in restraint of trade, misleading advertising and deceptive marketing practices. It also seeks to overcome the adverse effects of corporate concentration, to assist in maintaining effective competition.

7.11 The Assistant Deputy Minister of the Bureau, as the Director of Investigation and Research, must initiate an inquiry under the Act when, through a complaint or otherwise, he has reason to believe that there has been a violation of the Act or that grounds exist for the Commission to make a remedial order on a specified reviewable matter. Less often, the Director receives a formal application for an inquiry from six persons in the form of a statutory declaration, and there is provision for the Minister to direct that an inquiry be undertaken. In carrying out these inquiries, the Director, with the approval of the RTPC, has wide powers of search and seizure and authority to compel witnesses to provide evidence under oath. The Director may discontinue an inquiry, remit the evidence obtained to the Attorney General of Canada for such action as the latter may decide to take, or pursue the matter before the RTPC.

7.12 Under the guidance of the Director, the Bureau conducts its investigative activities through six branches: Manufacturing, Resources, Services, Regulated Sector, Marketing Practices, and Research and International Relations.

7.13 Bureau of Consumer Affairs. The Bureau of Consumer Affairs is responsible for ensuring that the interests of consumers are represented in all government activities that affect the marketplace and is involved in developing and administering programs for consumer protection and information. Approximately 80 per cent of Bureau personnel are employed in regional and district offices.

7.14 The Bureau conducts its activities through six branches, including the Management Services Branch, which provides the Bureau with assistance in planning and control, finance, personnel and administration. The Research and Evaluation Branch carries out background research on a variety of consumer-related issues, as well as providing research support and policy advice from the consumer's point of view.

7.15 The Legal Metrology Branch examines and approves weighing devices and electricity and gas meters used for trade in Canada. It also provides a field inspection program to ensure continued accuracy of such devices. The Consumer Products Branch, through the development of policies and inspection programs for a wide range of food and non-food products, is responsible for preventing fraud and deception and ensuring that consumers have accurate and necessary information on the advertising and labelling of such items as food products, textiles and precious metals.

7.16 The Product Safety Branch develops policies and field inspection programs to identify hazards in consumer products and ensures that dangerous products are removed from the market. The Branch also provides protection for consumers by establishing standards for the control of hazardous products and setting information and labelling requirements. The Consumer Services Branch provides information and consumer assistance through its programs for dealing with complaints and inquiries, and provides funding for consumer groups and advocacy.

Resources

7.17 The 1980-81 Estimates give the following summary of expenditures, revenue and authorized person-years. Revenue arises from inspection, patent, trade mark, and other fees, of which the Patents Branch accounted for close to 50 per cent. All the revenue of the Department is deposited into the Consolidated Revenue Fund.

	<u>Expenditures</u>	<u>Revenue</u>	<u>Authorized Person-Years</u>
	(thousands of dollars)		
Bureau of Corporate Affairs	\$ 20,944	\$ 21,843	711
Bureau of Competition Policy	9,784		255
Bureau of Consumer Affairs	33,598	1,650	943
Administration and Other	<u>14,783</u>	<u>1,563</u>	<u>421</u>
	<u>\$ 79,109</u>	<u>\$ 25,056</u>	<u>2,330</u>

7.18 The Department is labour intensive, with 77 per cent of its 1980-81 expenditures devoted to salaries, wages and contributions to employee benefit plans. Owing to the variety of Acts it administers, the Department's staff includes a large number of professionals such as lawyers, economists and engineers, as well as specialized non-professionals. The Department is geographically dispersed, with the head office in Hull, five regional offices and several district and area offices throughout Canada. Approximately 35 per cent of personnel are in the field; of these, 85 per cent are Consumer Affairs Bureau staff.

Environment

7.19 The operations of the Department of Consumer and Corporate Affairs cover a wide range of diverse activities from the supervision of bankruptcies to combines investigation, the incorporation of federal companies to product safety

research, and the granting of intellectual property rights in patents and trade marks to compliance inspection of weighing devices.

7.20 The many activities of CCA often require a balancing of opposing interests among various parties including federal government departments, provincial governments, international agencies and groups in the private sector. For example, the interests of creditors and bankrupt debtors are by their nature conflicting, as can be those of consumers and the corporate community. Accordingly, it is essential that program objectives and priorities are clearly established and internally consistent and that program activities are adequately co-ordinated.

7.21 The Department's orientation is primarily regulatory in nature. CCA is responsible, or shares responsibility with other departments, for the administration of some 60 Acts and more than 170 sets of regulations. Over the past ten years, the Department has devoted considerable effort to legislative revision; for example, in such areas as bankruptcy, patents, combines investigation, business incorporations, and electricity and gas inspection. However, it is a long and uncertain process from proposal to ultimate passage of legislation. This uncertainty can make it difficult to plan accurately for resource requirements and levels of service.

7.22 Because of the diversity of its operations, the conflicting nature of different interests involved, and the broad range of consumers and corporations affected by its activities, the Department often finds itself at the centre of controversy and in the public eye. Given this environment, an essential element for good management control is the provision of adequate mechanisms to gather and report accurate, reliable, timely and useful information concerning the conduct and results of the Department's various operations and the consistency with which its policies are being applied.

Audit Scope

7.23 Our comprehensive audit of the Department of Consumer and Corporate Affairs included a review of the adequacy of planning processes and management controls over CCA's major activities, including internal audit and financial management, with emphasis on the quality of information available for departmental managers. Also of interest was the information and the systems and procedures in place to measure and report on the efficiency and effectiveness of the Department's numerous activities.

7.24 In the Bureau of Corporate Affairs, we concentrated on the Bankruptcy, Corporations, and Patents Branches which together account for 84 per cent of Bureau staff, 82 per cent of expenditures and 81 per cent of revenue from Bureau activities. In the Bureau of Competition Policy, we examined the management controls in the Combines Investigation branches and the Marketing Practices Branch.

7.25 In the Bureau of Consumer Affairs, our examination was limited to a review of the progress made in addressing the effectiveness evaluation weaknesses identified in the Study of Procedures in Cost Effectiveness (SPICE), reported in our 1978 Report. These weaknesses were in the Bureau's regulatory activities, which account for 67 per cent of its expenditures and 80 per cent of its personnel.

7.26 In the Personnel Branch, our examination included a review of the progress made by the Department in addressing recommendations from our 1978 payroll costs management study.

7.27 We were able to review the approved IMPAC Action Plan for CCA during the final stages of our comprehensive audit and have taken management's planned corrective action into consideration in reporting the findings and recommendations arising from our audit.

7.28 Finally, we identified some features of the Department's programs that we believe should be highlighted in the revised Estimates so that Members of Parliament can better assess the Department's requests for resources, allocation of resources, and accomplishments from the use of resources.

Summary of Audit Observations

7.29 The Department of Consumer and Corporate Affairs was created by the amalgamation of a number of independent programs affecting a wide spectrum of the Canadian marketplace. These programs involve the development, enforcement and evaluation of legislation and regulations, with the bulk of resources being spent on the enforcement activity.

7.30 At its inception in 1967, the Department's structure was a conglomeration of independent activities. Since then it has evolved into a multi-divisional department with a single parliamentary appropriation. The Department has been faced with such influences as increasing and conflicting consumer and corporate needs and demands, the impact of rapidly advancing technology, frequent turnover of senior management, government imposed resource restraints and increased pressure for accountability.

7.31 The strategic direction and guidelines provided by senior management to the Bureau and Branch managers for preparation of multi-year and current-year operational plans were both comprehensive and timely. However, the quality of the planning information developed at the Bureau and Branch levels varied. In some cases, it was so incomplete that it was susceptible to misinterpretation. In others, it required only minor improvements. For example, in several activities, a clear definition of program clientele and their needs had not been identified or taken into account, the costs and benefits of alternative strategies had not been

assessed, and the effects of overlapping or conflicting activities within the federal government or in the private sector had not been identified or analysed.

7.32 For many of the Department's program objectives, management had failed to specify what was to be achieved in a way that would provide a basis for accountability for the use of public funds. Further, the validity and reliability of some of the effectiveness measures that were in place required improvement.

7.33 Some of the systems of performance measurement, particularly in the Bankruptcy and Corporations Branches, failed to take into account the quality and level of service provided, as well as the different work content of various activities and, in some cases, the reduction in work content. As part of the IMPAC action plan, the Department has begun a multi-year project to revise these performance measurement systems.

7.34 The Department was aware of its weaknesses and deficiencies and had made efforts to overcome them. For example, there was a marked improvement in the quality of the work of the internal audit group and in its effectiveness as a management tool. Similarly, financial management and controls in the Department were generally adequate, and those weaknesses that had been previously identified were being corrected satisfactorily.

7.35 In the Bureau of Corporate Affairs, Bankruptcy Branch management did not make good use of the findings resulting from the auditing and monitoring of individual private sector trustees to identify opportunities for improvement in the bankruptcy system as a whole. Also, in our view, the procedures that the Branch had in place for collecting and internally reporting information on the costs of administering bankruptcies did not facilitate monitoring of and accounting for the overall performance of the bankruptcy system.

7.36 In 1979, the Bankruptcy Branch began to reassess and redesign its enforcement strategy for detecting fraud and abuse. However, at the time of our audit, the Branch had still not clearly defined or documented the abuses which it intended to combat.

7.37 The Corporations Branch, which is required under the Canada Business Corporations Act (CBCA) to disseminate to the public information on corporate activity, had no reliable data concerning who received or used the information, how they used it, or what value it had. The Branch had not assessed the availability of this type of information from other sources. In addition, because of the imprecise definition of the environment within which the Branch operates, the extent to which disclosure requirements of the CBCA were achieved could not be assessed. These difficulties have resulted in the lack of a firm basis for making important operational decisions. The Director of the Corporations Branch has the authority to grant exemptions, under certain circumstances, from the filing

requirements of the CBCA. However, the Branch had not clearly specified or documented exemption criteria to be used in reviewing applications for exemptions. Further, there was no documented system to ensure that exemption criteria were being applied consistently. The Branch had established a number of case precedents; however, effective use of these appeared to depend on the memories of key personnel.

7.38 The Patents Branch, in response to management initiatives and internal audit recommendations, has conducted a comprehensive review of management controls related to both the quality and efficiency of its operations. It has recognized the nature of its difficulties and is taking corrective action to improve the quality of these controls.

7.39 In the Bureau of Competition Policy, whenever the Director of Investigation and Research has reason to believe that violations of the Act have occurred, he must commence an investigation, and it is the Bureau's responsibility to assign priorities and allocate resources among various inquiries. However, no clear guidelines had been developed to assist managers in making such decisions. As a result, there was no assurance that key factors were considered. This situation increased the risk that investigative resources might not be used cost-effectively. Over 40 per cent of investigations had not been completed by the target of 18 months and some were behind by as much as 43 months.

7.40 In the Bureau of Consumer Affairs, our follow-up work indicated that operating objectives had been translated into measurable terms. In addition, the Product Safety and Consumer Products Branches had made some progress toward developing reliable measures of program effectiveness in reducing economic loss to buyers and sellers. The Legal Metrology Branch, however, had not done so.

7.41 Our review of the Personnel Branch indicated also that, with a few exceptions, action had been taken to correct the deficiencies identified in our 1978 payroll costs management study. We found, however, that there was no basis for ensuring that human resource plans reflected the needs of the operational managers. In the training area, the budgeting process caused delays of a year or more before individual training needs were met.

Observations and Recommendations

7.42 This section outlines our observations and recommendations pertaining first to the department-wide issues of planning, performance measurement, effectiveness evaluation, internal audit and financial management and control and then to issues specific to the Bureaux of Corporate Affairs and Competition Policy. We next comment on our follow-up of audits we conducted in the Department that have not previously been included in annual Reports, except as part of a government-wide study of the areas concerned. These include the 1978 SPICE report on the regulatory activities in the Bureau of Consumer Affairs

and the 1979 payroll costs management report on human resource planning, training, and human resource information systems. Lastly, we comment on areas that we suggest should be highlighted in the revised Estimates.

Planning

7.43 In our audit of planning, as well as in our audits of performance measurement and effectiveness evaluation, we reviewed the adequacy of information available to departmental managers and the extent to which this information assisted managers to give due regard to the economic and efficient use of public funds. We also reviewed the accountability relationships within the Department, the adequacy of strategic and directional information from senior management to line managers, and the adequacy of information on performance and accountability available to senior managers. Among others, we examined the following documents: Departmental Planning Cycle, Guidelines for Planning, the Strategic Overview prepared for 1982-83, multi-year operational plans, and various operational reports and other planning documents.

7.44 During the previous year, senior management had made significant improvements in the departmental planning process to provide information to the Bureaux concerning ministerial and departmental priorities and strategies, assumptions about legislative changes, opportunities, risks, and funding levels, and guidelines for preparing operational plans. In our opinion, this information was adequate for planning purposes. For example, the Strategic Overview prepared for 1982-83 and guidelines for preparing multi-year and current-year operational plans were both comprehensive and timely.

7.45 However, the quality of the plans prepared at the Bureau and Branch levels varied. In some cases, they were so incomplete, as to be susceptible to misinterpretation. In others, they only required minor improvements. In particular, information on program environment and the analysis of such information were generally inadequate. For example:

- There was not always a clear identification of intended clients or recipients or their needs in the Bankruptcy Debtor Service and Corporations Compliance programs.
- Problem areas and the nature, magnitude and location of the problems to be addressed in Product Safety and Competition Policy programs had not been determined.
- Costs, benefits and implications of alternative strategies for program delivery had not been sufficiently analysed. There was no evidence that quality, level of service and security had been assessed in Patents, Electricity and Gas, Corporations and Trade Marks programs where delegation of authority to the private sector had been considered.

- The impact of legislative and policy changes on work procedures, program delivery, quality and level of service and resource requirements had not been adequately or systematically analysed.
- The aims and effects of overlapping or conflicting programs and activities in the federal government or the private sector had not been compared and analysed so that appropriate co-ordination of efforts could be established.

We also observed that, although progress had been made in incorporating a basis for comparing results with plans in some programs, this had not been done for others, thereby limiting CCA's ability to assess performance.

7.46 *The Department should ensure that branch managers identify, analyse and use information on environmental and other factors relating to their programs in developing branch plans and priorities.*

Performance Measurement

7.47 Although the Department's IMPAC Action Plan identified a project to carry out a review of performance indicators for effectiveness and quality and level of service at the activity and sub-activity levels, it did not address opportunities for improvement in efficiency measures.

7.48 For certain programs, output measures were not representative of the work performed. For example, the number of new incorporations, which the Corporations Branch uses as a measure of output, is the work of the Incorporation Division, which accounts for 53 per cent of total person-years within the Branch. The Bankruptcy Branch uses the number of bankruptcy cases as a measure of output; however, no allowances were made for the different work content of commercial and consumer bankruptcies. Consumer bankruptcies require only about a third the labour input that goes into commercial bankruptcies. These output measures also made no allowance for the fact that some of the work, such as name searches for incorporations and trustee functions for consumer bankruptcy cases, had been assumed by the private sector, thereby reducing the demands on the Department's workforce. As a result, actual increases in efficiency have not been as great as those reported.

7.49 The Department requires each Bureau to report quarterly to the Deputy Minister on performance results as well as planned and actual expenditures. We found that these reports, in some cases, were unwieldy, incomplete and did not provide explanations of changes in performance or, for reasons outlined previously, did not contain adequate measures of performance for review by senior management.

7.50 *In its review of performance measurement systems, the Department should ensure that the output measures reflect the different work content of all activities and take into account major changes in work procedures.*

7.51 *The Department should refine the form and content of Bureau quarterly reports to ensure that information is presented in a more concise manner with meaningful explanations of changes in performance.*

Effectiveness Evaluation

7.52 We reviewed the way in which the Department's evaluation and regulatory review processes are carried out and managed as a basis for determining the extent to which satisfactory procedures existed to measure and report the effectiveness of its programs.

7.53 The Department is in the process of establishing a program evaluation function in accordance with the guidelines set out by the Office of the Comptroller General. The responsibility for program evaluation, including regulatory review, has been assigned to the Director General, Co-ordination. A departmental program evaluation policy has been drafted and approved by the management committee, but had not been promulgated by the scheduled date of April 1981. The development of a program evaluation plan was scheduled to be completed by September 1981.

7.54 Some effectiveness measurement and related studies have been done by the research branches of the Bureaux, the Department's internal audit group, or by external agencies such as the Economic Council of Canada. Based on certain of these studies, some potential changes are being considered. These are aimed at improving compliance and program impact, facilitating enforcement and enhancing the cost-effectiveness of administration. Many of these changes would require revisions in legislation and regulations. Accordingly, the Department has made proposals for changes in legislation in such areas as bankruptcy, combines investigation, patents, and electricity and gas meter inspection. In addition, the Department has embarked on a four-year review of all the regulations it administers to find opportunities to simplify them and determine whether all are serving the purposes for which they were originally designed.

7.55 Many CCA program objectives were not specific enough to permit measuring the degree to which they were being achieved. Thus, the objectives did not provide a clear basis for holding the Department accountable for the use of public funds allocated for this purpose. In addition, there is a problem in determining the extent to which the achievement of an objective can be attributed to any one program or even to any one department. For example, the Patent Branch's objective is "to encourage invention, innovation and creativity in Canada", and the Consumer Affairs Bureau's objective is "to foster the consumer's right to safety, to information and fair dealing, and to be heard". Achieving these

and other objectives requires co-operation and co-ordination with many other government departments and agencies, as well as private sector organizations. Consequently, it is difficult to determine what portion of the achievement of objectives can be attributed to CCA programs.

7.56 *The Department should ensure that its objectives are translated into operational terms that will facilitate measurement, where feasible, of the extent to which departmental programs contribute to these objectives.*

7.57 The validity and reliability of some of the effectiveness measures in place needed to be improved. For example, for the Debtor Service program, the Bankruptcy Branch used as a measure the actual number of insolvent consumer debtors who have been provided with relief and rehabilitation, compared to the estimated number of insolvent consumer debtors who should have been rehabilitated. The estimated number of these debtors is not reliable because the Branch had no criteria for determining which applicants for bankruptcy should be provided with relief and rehabilitation and which should not. We believe that it is important to have a more realistic estimate of the number of insolvent consumer debtors not only for effectiveness measurement, but also for determining the most appropriate level of service and deciding on resource allocations.

7.58 The Weights and Measures Division of the Legal Metrology Branch used the number of errors detected in weighing devices as a measure of the effectiveness of their inspection services. While this type of yardstick measures the number of errors detected, it does not measure their significance in terms of economic loss to consumers and the business community. Consequently, the usefulness of these indicators to measure results and to improve program effectiveness has been limited.

7.59 Poor data bases have been a major constraint to developing satisfactory measures of effectiveness for some programs such as Patents, Bankruptcy and Competition Policy. Constraints of this kind highlight the need to assess CCA programs to determine those for which effectiveness measurement and evaluation can be reasonably implemented and cost-justified.

7.60 Management of some programs, including Consumer Products and Patents, have taken steps to improve the quality of the effectiveness indicators and the data base used in measuring the effectiveness of their programs.

7.61 *As part of the implementation of the program evaluation plan, once it is developed and approved, the Department should undertake evaluation assessments aimed at identifying those program components for which evaluation studies can be reasonably implemented and cost-justified.*

Internal Audit

7.62 The Department's internal audit is performed by the Operations Review group, which for administrative purposes is included in the Co-ordination Directorate. The Director of Operations Review reports direct to the Deputy Minister, who also acts as Chairman of the Departmental Audit Committee.

7.63 The Director of Operations Review is responsible for a staff of nine professionals and two administrative employees. The 1980-81 authorized budget for internal audit was \$464,000, including professional fees for audit work done by outside consultants. In addition, provision is made for the secondment of other departmental personnel from time to time. The Operations Review group is responsible for compliance reviews of financial, administrative, personnel and other functions, including determining the extent of compliance with prescribed policies and procedures. In addition, the group is responsible for operations reviews of the Department's management and administrative processes, from the determination of policies and objectives through to the conduct of operations. Operations reviews also include appraisals of whether satisfactory procedures to measure effectiveness exist.

7.64 As part of a government-wide study in 1978, our Office reviewed the internal audit function in the Department. The purpose of the study was to assess the extent to which government received value for money spent on internal audit activities. The study identified several weaknesses and concluded that the internal audit function was not adequate to provide an independent and systematic examination of the Department. In September 1979, the Office of the Comptroller General began an IMPAC survey in CCA to identify, among other things, the current state of management practices in internal audit, to support the development of an action plan for the correction of the identified deficiencies and to monitor implementation of the plan.

7.65 In our examination of the internal audit function, we reviewed our 1978 findings and the Comptroller General's findings to determine the extent to which the group had addressed and corrected deficiencies.

7.66 The Department had made considerable progress toward implementing all our major recommendations and overcoming weaknesses identified by the Comptroller General on the issues of organizational independence, mandate and audit practices. The organization and reporting arrangement of the Operations Review group provide a satisfactory degree of independence and objectivity in its reviews of all operations in the Department.

7.67 Our review of the internal audit work indicated that management controls over the compliance and operations reviews were satisfactory, that the work was well planned and executed, and that the format of reports provided for adequate disclosure of audit scope and results. In addition, we found that work

had been carried out and documented in compliance with generally accepted standards and that the reporting process had been amended to provide for faster publication of final reports.

7.68 The Consumer and Corporate Affairs Audit Committee was formed after 1978 and is composed of the members of the Departmental Management Committee chaired by the Deputy Minister. The Committee is responsible for reviewing internal audit plans, reports and implementation of recommendations.

7.69 In our opinion, the Operations Review group was an example of a good comprehensive internal auditing function and appeared to be serving as an effective control for departmental management. In addition, we believe that this Office can place a high degree of reliance on the work of the group.

Financial Management and Control

7.70 The Director of the Finance Branch is responsible for the quality and reliability of all financial management and control systems including budgetary systems. The Director reports to the Director General, Finance and Administration who reports directly to the Deputy Minister. The 1980-81 authorized budget for the Finance and Administration Directorate was \$5.9 million and 180 person-years.

7.71 In addition to our current review of financial management controls, we followed up the recommendations outstanding from our 1975 Financial Management and Control Study on the Department and found that all of them had been addressed satisfactorily. We concluded that financial management controls, including those over expenditures and revenue, were generally adequate; however, there were some weaknesses in the financial information system and in management reports. For example, financial and operational planning and control reports were not integrated to provide senior management with the information to compare actual program progress against plans. The Department was aware of these weaknesses and had developed an action plan to implement improvements.

Bureau of Corporate Affairs

7.72 Within the Bureau of Corporate Affairs, as noted in the audit scope, we concentrated our audit work on the Bankruptcy Branch, the Corporations Branch and the Patents Branch.

Bankruptcy Branch

7.73 The Bankruptcy Branch is the administrative designation for the Office of the Superintendent of Bankruptcy. The Superintendent is generally responsible for the administration of the Bankruptcy Act, and his role includes the

provision of policy advice to the Government concerning the design of the bankruptcy system. The objective of the Branch, as stated by the Department, is to promote confidence in, and to protect the integrity of, the credit system in Canada by ensuring efficient administration of bankruptcies by competent trustees and by ensuring fairness and equity for creditors.

7.74 The total number of bankruptcies in 1980 was 27,620, of which 6,595 were business bankruptcies and the remainder were individual consumer bankruptcies. Total assets and liabilities liquidated under the Bankruptcy Act amounted to \$434 million and \$1,198 million respectively. The Branch was responsible for the licensing and overall supervision of the work of 506 individual trustees and 53 corporate trustees, all from the private sector.

7.75 We reviewed the suitability of the information base used by the Branch to control the quality and costs of estate administration and to combat offences against and abuses of the credit system. In addition, we reviewed the procedures used to measure and report on the efficiency of Branch operations.

7.76 Quality of bankruptcy administration. The duties of the trustee-in-bankruptcy relate to the often tangled affairs of debtors and normally include receipt and review of claims against bankrupts, preparation of inventories of assets, sales of assets and distribution of the proceeds. They can also include reviewing pre-bankruptcy transactions, operating a debtor's business on a short-term basis, attaching income or assets acquired after bankruptcy for the benefit of creditors, and making recommendations to the courts concerning timing or other conditions of discharge of bankrupts. The effectiveness of the bankruptcy system depends heavily on the quality of the trustees' exercise of their professional responsibilities.

7.77 Within the framework of the Bankruptcy Act and Rules, trustees are directed by inspectors appointed by the creditors. In addition, the Superintendent of Bankruptcy is generally responsible for supervising the administration of bankruptcies. Since the mid-1960s, the Superintendent has taken important steps to strengthen the qualifications and performance of trustees by raising licensing standards, encouraging a national professional association, and ensuring closer day-to-day liaison with trustees.

7.78 In addition, there have been substantial changes in the Bankruptcy Branch's review of the quality of bankrupt estate administration. Instead of maintaining detailed scrutiny of documents relating to the administration of each estate, the Branch now conducts in-depth financial and operational audits of each trustee's practice every three to four years, and district offices have special monitoring programs for new trustees and others whose work requires attention in specific areas.

7.79 Although these new surveillance techniques are more cost-effective than previous methods for identifying and correcting individual problems in estate administration, the results of the Branch's auditing and monitoring of trustees have not been consolidated and analysed to identify the nature and extent of any major weaknesses in the bankruptcy system as a whole.

7.80 Even though the Superintendent and his key officers receive a certain amount of formal and informal information about the quality of bankrupt estate administration, we believe that summarizing and analysing the findings of the auditing and monitoring of individual trustees' performance would result in a number of improvements to the management process. For example:

- permanent records of system performance could be maintained, reducing reliance on the memories of individuals;
- potentially serious or recurring problems could be identified to aid in setting Branch priorities on trustee audits and monitoring;
- weaknesses in estate administration could more reliably be linked to specific district offices, thereby pinpointing the need for corrective action; and
- overall quality of bankrupt estate administration could be reported to senior departmental management.

7.81 *The Bankruptcy Branch should consolidate the results of trustee audits and monitoring to identify the areas of bankruptcy administration that need improvement.*

7.82 **Costs of estate administration.** The costs of administering estates in bankruptcy consist primarily of trustees' fees and expenses which are paid out of the realization of estate assets. The primary responsibility for controlling these costs rests with the creditors, and the courts are responsible for reviewing and approving the estate accounts rendered by trustees, including bills submitted for fees and expenses.

7.83 The Superintendent's objective of ensuring maximum returns to creditors includes a concern for the efficient administration of bankruptcies and reasonableness of trustees' fees and expenses. The Superintendent advises on the suitability of the bankruptcy law and procedures, the form in which trustees' accounts are to be presented, the level of solicitors' fees below which the courts need not review the bills of costs, and the tariff schedules applicable to trustees.

7.84 The official tariff of trustees' fees for business bankruptcies was set in the Bankruptcy Act of 1949, based on 7.5 per cent of the realizations from the sale of assets after distributions to secured creditors, or such other amount as

may be allowed by the court. In 1973, the Superintendent established the consumer bankruptcy tariff at \$500. These tariffs are generally regarded as outdated and are exceeded by a wide margin. In recent years, the ratio of trustees' fees and expenses to realizations has increased considerably.

7.85 Although the Branch lacked specific data to explain this increase, the Superintendent considers that a major factor in the growth of this ratio is the general strengthening of the position of secured creditors in business bankruptcies through the more frequent use of broader and more valid security instruments, resulting in less unsecured assets available for distribution. Liquidation of the assets covered by such instruments generally occurs with the appointment of a trustee to act as a receiver on behalf of a secured creditor and before formal bankruptcy proceedings are begun. Thus unsecured assets, on which the trustee tariff of 7.5 per cent was based, have become a much smaller portion of the total assets of a bankrupt than they were at the time the tariff was originally established. We understand that proposed changes to the Bankruptcy Act, bringing these receiverships and liquidations, in addition to formal bankruptcies, under the Superintendent's purview, would enable him to obtain reliable information on the volume, value and costs of all liquidations.

7.86 The Bankruptcy Branch did not have reliable information in its records on which to base tariff recommendations. For consumer bankruptcies this was due in part to inconsistencies in the way trustees and district offices reported costs when proceeds from the sale of assets were insufficient to cover trustee billings, resulting in an upward bias in reported costs, although the extent of the distortion was not known. We noted that this situation also resulted in an overstatement of the actual realizations in consumer bankruptcies.

7.87 In evaluating existing and alternative ways of administering bankruptcies, the Branch did not obtain information on trustees' fees, as distinct from expenses, and summarize and analyse these together with the internal costs of the Branch for all bankruptcies. Thus, in our opinion, the procedures in place for collecting and reporting information on estate administration costs did not facilitate monitoring of and accounting for overall system performance.

7.88 We recognize that the subject of fees and expenses is a difficult and sensitive one and that excessive zeal in attempting to reduce costs below a reasonable level could jeopardize the continued interest of trustees in bankruptcy estate administration. Bankruptcy Branch management has informed us that it will continue to discuss the costs issue with the courts, to review the tariff for bankruptcies, and to develop a more detailed format for the presentation of accounts.

7.89 *The Bankruptcy Branch should ensure that its records of trustees' fees and expenses are accurate and utilize this information to assess the appropriateness of the current tariff and, if warranted, propose revisions.*

7.90 Preventing fraud and abuse. A major responsibility of the Bankruptcy Branch is to protect the credit system and bankruptcy proceedings from fraud and other abuses. The Branch's detection efforts include examining debtors under oath, contacting creditors, debtors' employees, trustees and others, and reviewing books and records. The Branch no longer engages directly in full-scale criminal investigations; these are carried out by the RCMP on behalf of the Superintendent.

7.91 In 1974, the Branch developed a method for selecting bankruptcies for investigations of possible fraud and abuse, and for determining which techniques to use and how much staff time to devote to each case. The method was developed without a solid base of information, such as the probability of fraud in various categories of bankruptcies, the size of such frauds, and the cost-effectiveness of alternative ways of detecting them.

7.92 We found that, although several reviews of this enforcement strategy had been initiated since 1974, the Branch had not clearly defined the abuses which it intended to combat or determined whether its investigations had been effective.

7.93 In June 1979, the Branch began to reassess and redesign its enforcement strategy for detecting fraud and abuse with the intention of making some changes in policy. For example, detection previously began with the examination of debtors under oath, supplemented by other steps as appropriate. Under the new policy, contact with creditors is the basic detection technique, with other steps to follow, depending on the circumstances. Examinations under oath are used in only 10 per cent of consumer bankruptcies and approximately 50 per cent of commercial cases.

7.94 *The Bankruptcy Branch should identify abuses to be prevented and their magnitude, and establish the priority for addressing them.*

7.95 Efficiency. The Bankruptcy Branch has taken a number of steps to reduce its labour costs. For example, the administration of consumer bankruptcies has been turned over to the private sector and the Branch's role now consists mainly of processing initial documentation and referring cases to private sector trustees for administration. In addition, operations such as the monitoring of the quality of bankruptcy administration have been streamlined.

7.96 Using its efficiency measurement system, the Branch has reported steady increases in productivity, averaging about 22 per cent a year between 1976-77 and 1980-81. We found that the measurement system tended to exaggerate increases in efficiency.

7.97 The Branch uses either a consumer or business bankruptcy filed as its unit of output and measures efficiency by the person-hours and dollar cost required to process a bankruptcy. We found that the number of bankruptcies did not properly reflect the workload of the Branch. This output measure did not allow for differences in work content or the changes in the mix of cases that made up the Branch workload. Branch management informed us that a consumer bankruptcy requires only about one-third the time needed to process a business bankruptcy and also that the proportion of consumer bankruptcies increased from about half the total in 1971 to about three-quarters in 1980. The efficiency measures did not take this change into account by weighting the outputs for the relative amount of effort that goes into each type of bankruptcy. Furthermore, the measure made no allowance for the major reduction in work content of cases that resulted from turning portions of the work over to the private sector. Consequently, these measures did not provide a reliable indication of how efficiently the Branch was operating.

7.98 At the district office level, the Bankruptcy Branch operational plans indicated that unit time and cost standards for such operations as registration of files, referrals to trustees and detection activities had been developed. However, the performance measurement system did not routinely monitor results against these standards. This hampered early identification of areas requiring corrective action.

7.99 In addition, although the Branch measured the quality of its Debtor Service program by the amount of time taken to refer an insolvent debtor to a trustee, it did not measure the quality of the Branch's output as a whole.

7.100 *The Bankruptcy Branch should ensure that its performance measurement system utilizes units of output that are representative of the total Branch workload and provides for regular comparisons of results against standards or plans.*

Corporations Branch

7.101 In 1980-81, the Corporations Branch budget was \$1.4 million and 69 person-years. The Incorporation Division of the Branch is engaged in the incorporation of companies and the management of the corporation name-search activity. The operation of the name-search activity, has, to a large extent, been turned over to the private sector. The Compliance Division is responsible for collecting and disseminating to the public information required to be filed under the CBCA, for issuing exemptions from various CBCA requirements, for conducting inquiries and investigations into corporate misconduct and for enforcing compliance with the Act.

7.102 We concentrated our audit work in the Compliance Division on the management systems used to plan, control and evaluate the corporate disclosure

activity and the issuance of CBCA exemptions. In addition, we reviewed the procedures used to measure and report the efficiency of Corporations Branch operations, particularly the use of historical trends for planning and accountability purposes.

7.103 Corporate disclosure. The CBCA is a complex piece of legislation, requiring corporate managers to meet a number of obligations to investors, government, other specific groups, and to the public generally. One of these obligations is to disclose information to the Branch on corporate activity, such as financial results and inside shareholder trading.

7.104 There are more than 80,000 companies incorporated under the CBCA and it is thus difficult to ensure full compliance with the law. The Department relies largely on the self-enforcing aspects of the Act; that is, aggrieved parties such as minority shareholders may initiate complaint action with the Department or through the courts. With regard to the Act's disclosure requirements, the Branch performs an active role such as conducting informal inquiries into corporate misconduct; however, we found that the Branch lacked certain basic management information needed to develop an appropriate management system for planning, controlling and evaluating its activities.

7.105 The Branch had no reliable data concerning who received or used the corporate information that it disclosed, how they used it, or what value it had to its users. Neither had the Branch clearly defined who should receive this information. Further, the Branch had no method of assessing the availability of corporate information from other sources, of the disclosure requirements imposed under provincial legislation or of the extent of compliance enforcement at the provincial level. Because of this imprecise definition of the environment within which the Branch operates, the extent to which the disclosure requirements of the CBCA are achieved could not be assessed. The Branch's capacity to recommend appropriate legislative and regulatory changes, for either disclosure or enforcement purposes, has not been developed. Further, the Branch's direct contribution to corporate disclosure cannot be determined, and efforts to establish enforcement priorities and to plan personnel requirements cannot be based on reliable empirical data.

7.106 These difficulties, in turn, have resulted in the lack of a firm basis for making important operational decisions. For example, a sound environmental assessment would improve the Branch's ability to decide which indicators to use in measuring compliance, what level of compliance is cost-justified, how active the information verification and dissemination functions should be, and what would constitute an appropriate number and level of staff to achieve specified goals.

7.107 *To determine Branch priorities and personnel needs and to provide a basis for developing appropriate management systems for planning, controlling and evaluating its activities, the Corporations Branch should:*

- *clearly identify the users of corporate information supplied by the Branch and the nature of their needs;*
- *determine the availability of corporate information from sources other than the Branch; and*
- *determine the degree of non-compliance with all disclosure and filing requirements under the CBCA.*

7.108 Exemptions. The CBCA makes provision for exemption from certain of its regulatory requirements. Some exemptions may be granted only by the courts; others are within the authority of the Director of the Corporations Branch. During 1980-81, the Corporations Branch approved 372 exemption applications under the CBCA and another 33 under the now repealed Canada Corporations Act.

7.109 Within the framework of the CBCA and its regulations, the Director has some latitude in determining the circumstances under which exemptions or partial exemptions are warranted. This discretion is broader in respect to certain requirements, such as financial disclosure, than it is for others. We examined the extent to which the Branch had established criteria and review procedures for making exemption decisions.

7.110 We found that one official policy statement on CBCA exemptions had been published and related to the need for insider shareholders to file trading reports. Except for this policy statement, another released in draft form and the regulations themselves, the Branch had not clearly specified or documented the exemption criteria to be used in reviewing applications for exemption. Further, there was no documented system in place to ensure that those exemptions criteria that did exist were being applied consistently.

7.111 The Branch had established a number of useful case precedents covering most types of exemptions; however, effective use of these appeared to depend on key personnel staying with the Branch. A set of proposed policy papers on a number of exemption types was prepared in early 1980, but these had not been refined or formally adopted. In addition, we were informed that documentation of the decision-making process had begun but, because of workload pressures, the task had not been completed.

7.112 In our opinion, the absence of well documented decision criteria and review procedures increases the risk that the quality of the exemptions process could suffer. We recognize that the exercise of judgement and discretion will always be required in reviewing exemption applications. It would not be possible or even desirable to specify all the conditions that shape decisions in unique circumstances. Nevertheless, some provincial securities commissions have been

successful in clarifying the criteria to be used in comparable exemptions processes.

7.113 *The Corporations Branch should document exemption criteria and the procedures for the review of exemption applications and monitor their use.*

7.114 **Efficiency.** For reporting to senior management, the Corporations Branch calculates its efficiency by relating total Branch resources expended to the number of new incorporations handled by the Incorporations Division. However, only 53 per cent of total Branch person-years are employed in that Division; 47 per cent are employed in the Compliance Division ensuring compliance with various laws governing incorporations. In recent years, the nature and work content of new incorporations handled in the Incorporation Division has changed because the corporation name-search activity has largely been turned over to the private sector.

7.115 Although the Branch's monthly operational reports showed the number of outputs produced by both Divisions, the efficiency of the whole Branch was calculated only on the outputs produced by the Incorporation Division. Thus, Branch management is not in a position to make sound judgements about the productivity of the Branch and there is also a danger that operational plans will be based on inadequate workload data.

7.116 *To improve its efficiency measurement procedures, the Corporations Branch should ensure that all key Branch outputs are represented in efficiency calculations and that major changes in the work procedures and work content are taken into account.*

Patents Branch

7.117 The Patents Branch is responsible for administering the Patent Act and Patent Rules. The Branch's principal functions are to grant patents to inventors, issue compulsory licences, and inform the public about patent protection and the technical content of patents. The ultimate objective of the Patents Branch is to encourage invention and innovation in Canada.

7.118 In 1980-81, the Branch operated with a budget of \$8.9 million and 362 person-years, and estimated fee revenue amounting to \$12 million. The Branch processes between 26,000 and 30,000 patent applications each year. Fees are charged for most of its services, and the revenue collected more than covers the Branch's direct costs of operation.

7.119 We examined the suitability of the management controls used by the Patents Branch to ensure the quality of patent examination and classification. In

addition, we reviewed the procedures used to measure and report on the efficiency of its operations and on the Branch's effectiveness in achieving its objectives.

7.120 Quality control. In addition to its administration and support staff, the Patents Branch employs 116 engineers, physicists and chemists in the examination of patent applications. Another 19 professionals maintain a complex patent classification system with over 34,000 sub-classes. To a great extent, the quality of the Branch's output depends on the suitability of the classification system for searches of existing technology and on the skill of examiners in making complicated technical and legal judgements.

7.121 Patent applications are examined to determine if the subject matter is patentable, if the invention disclosed is new and useful, and if sufficient inventive ingenuity is evident. Branch managers point out that most of the applications appear to make claims that are broader than are justified. Another difficulty is that, to be patentable, inventions must involve advances that are not obvious to persons skilled in the relevant technology. In areas of disagreement, the role of the examiner is to deal with the applicant or his agent to achieve appropriate amendments to the application. The examiner tries to ensure that the applicant secures a valid patent and that the rights of the applicant are properly balanced with the interests of other patent holders and the public.

7.122 At the time of our audit, both the Department's internal audit group and the Patents Branch had identified certain quality control weaknesses in the Branch's operations. Since mid-1980, the Patents Branch has made substantial progress in establishing improved quality control systems. A comprehensive review of quality-related management controls has been conducted, and major steps have been taken to monitor and raise the quality of Branch work processes and output. We are satisfied that the Patents Branch has recognized the nature of the deficiencies in its systems and has taken constructive action to resolve them.

7.123 Efficiency. When the Branch's performance measurement system indicated a 7.4 per cent efficiency decline in 1979-80 attributable to an international decline in patent applications, management took steps to redress the situation by resource reduction through consolidating activities, reduction of search and examination time, and placing more reliance on outside proven sources including work that had been done by patent examiners in the United States. In addition, the Branch participated with the private sector in developing a computerized search and retrieval information system. The Branch reported a 1.6 per cent efficiency improvement in 1980-81 and has set a target of 15 per cent improvement for 1981-82. However, we found that the Branch's performance measurement and reporting system did not provide reliable information on efficiency.

7.124 Efficiency is measured by the number of person-hours used to process a patent application and allow or abandon it. Applications may be abandoned

because the subject matter is unpatentable or because the applicant failed to respond to Branch communications. An abandonment may require significantly more or less time than an allowance. The mix of the two types of disposals may vary and the measurement system did not take into account the relative work contents of these two outputs. Also, even though recent changes in procedure have reduced examination work content, the historical standard used for efficiency measurement had not been adjusted accordingly.

7.125 Processing and disposal of applications accounted for less than half the total Branch person-years. The volume of other activities, such as classification, documentation, appeals, licencing, and disclosure and information services, did not always vary in direct proportion with the volume of disposals. The measurement system did not provide performance information on these other activities, the majority of which are routine. Although inputs into these activities were monitored, outputs were not, and productivity standards were not established against which to compare actual results. In addition, the efficiency measurement standards used in planning and monitoring the examination activity made no reference to quality.

7.126 These weaknesses in the Branch's measurement system limited management's ability to establish overall Branch plans based on full consideration of the contribution that each of the major activities made. In addition, managers could not readily identify particular operational components that adversely influenced the Branch's productivity for review and corrective action. Management recognized these deficiencies and has begun to implement a new information system to address them. The Branch also plans to establish a quality assurance program in 1981-82 to monitor examination results and develop standards and measures of performance with a view to generally upgrading overall quality of examination output. The Branch was also addressing other issues that affect performance, such as the impact of impending retirements and the lengthy training period needed to replace those retiring.

7.127 *In implementing its new management information system, the Patents Branch should ensure that:*

- *performance measurement of all major operational activities is included;*
- *quality standards, when fully developed, are used in planning and monitoring Branch productivity; and*
- *productivity measurement takes into account changes in the examination work content and in the mix of various Branch outputs.*

7.128 **Effectiveness.** The Patents program objective of encouraging invention, innovation and creativity in Canada is not one the Branch alone can be held

accountable for achieving. Other programs and factors such as the Competition Policy program of CCA, as well as research and development grants and activities, tax provisions and loan programs of the government, also contribute towards the achievement of this objective. Thus, it might be difficult for the Branch to determine the amount or rate of innovations in Canada attributable to its efforts.

7.129 The Bureau has also experienced data constraints in the measurement of this objective. The Bureau's Research Branch has conducted ad hoc research studies to provide a basis for making assessments of the impact of the program, but has had to contend with unavailability of pertinent data on patents. Therefore, it channelled its efforts to meet these data needs; for example, by establishing PATDAT, a patent data system, in collaboration with Statistics Canada. The Branch is also proposing changes in the patent legislation to provide the necessary authorization for collection of relevant information on the working of patents. This will include, for example, information on whether a patent is being worked commercially in Canada, by whom, under what conditions, and for what time period, and, if the patent has been licensed, when, to whom, and under what conditions.

7.130 During our audit, Branch management completed the first phase of a study of the Patents Office in which it reviewed the objectives of the Branch. The review did not translate the Branch's ultimate objective into specific measurable terms. Further work on review of the objectives is planned by the Branch when the proposed changes in patent legislation are passed.

7.131 Because the Branch is primarily a patent or limited-monopoly granting agency, its intermediate objective of protecting the rights of inventors and owners of patents can be evaluated. Granting proper or good quality patents provides limited monopoly rights and protection to the owners of patents, and measuring achievement of this objective can be approached through measuring quality of patents granted. Quality of patent output has been informally monitored by such measures as number of patents that go to court, number of appeals, and number of complaints. The Branch has indicated that it plans to establish a quality assurance program and data base for assessing program impact in 1981-82 to monitor and upgrade patent quality.

7.132 We found, however, that the achievement of the objective of protecting the rights of inventors through granting limited monopoly patents may be in conflict with the objective of encouraging invention and innovation in Canada. Given that about 95 per cent of all patents are issued to foreigners, the monopoly power conferred to foreign individuals could lead to suppression rather than exploitation of patented technology, thereby restraining innovation in Canada. For example, a foreign patentee may not be capable of developing his invention and may even object to its use. Thus, there is a need to decide on the most appropriate trade-off between these potentially conflicting objectives.

7.133 *During its review of objectives, the Patents Branch should ensure that criteria are developed to determine the most appropriate trade-off between potentially conflicting objectives.*

7.134 *In conjunction with its review of objectives, the Patents Branch should try to determine, within cost-effective limits, ways of measuring the impact of the Patents Program.*

Bureau of Competition Policy

7.135 In the Bureau of Competition Policy, we reviewed both the combines investigation activities and the Marketing Practices Branch. For combines investigation, our audit focused on identifying and assessing the systems and procedures in place to measure and report effectiveness and on assessing the adequacy of management controls over the planning and execution of inquiries. Our audit of the Marketing Practices Branch covered the measurement and reporting of efficiency. In conducting the audit, we took into account the observations resulting from a 1980 study of the Branch carried out by the departmental internal audit group.

Combines Investigation

7.136 Effectiveness measurement. Our audit of the Bureau of Competition Policy indicated that its program objective, to promote open, efficient and competitive conditions in the market-place and to foster innovation and change, was not specific enough, as to the intended results, to be used as a basis for holding the Bureau accountable for achieving that objective. Bureau management had not adequately translated this broad objective into operational terms. For example, through analysis of information, such as the amount of concentration in various industries, the Bureau could identify potential problem areas and specific operational objectives, and develop plans to address them. The identification of these areas would also provide a basis for ranking inquiries.

7.137 Measurement of the Bureau's success in meeting its objective is complicated by the fact that other programs, including Patents, research and development across government and grants for research and development activities, contribute to the fostering of the innovation and change aspect of the objective. There is, therefore, a need for the Bureau to define the ways in which it can contribute to this part of its objective and measure its success in doing so.

7.138 To assess program effectiveness, Bureau management has used a number of internal and external studies. In addition, it has used proxy measures such as the amount of concentration in specific industries, price, prosecution success rate, and types of offences and length of detection period to evaluate informally the effectiveness of the program and its enforcement component. These measures, taken separately, did not provide a measure of the extent to

which the Bureau promotes competition. At the time of our audit, systematic analyses of these measures, along with such other factors as the nature of the industry, technology and location, had not formally been carried out on a regular basis.

7.139 We noted, too, that responsibility for effectiveness evaluation was shared by the two deputy directors, and their respective roles had not been clearly delineated, thereby leading to confusion of roles and lack of accountability for program evaluation.

7.140 *The Bureau of Competition Policy should translate its objectives into operational terms and use these as a basis for ranking and conducting inquiries and for evaluating the Bureau's success in meeting them. It should clearly assign responsibility for effectiveness measurement and reporting.*

7.141 **Planning and control.** The Bureau has recently implemented new management techniques to strengthen the planning and control of inquiry activities. Planning has been improved by the use of formal investigative plans called impact statements which address important inquiry issues, requirements for evidence, tasks to be performed and estimated resource requirements. Impact statements were first introduced in late 1979 and have since been fully integrated into the inquiry process with each preliminary investigation.

7.142 At 31 March 1981, over 40 per cent of the formal inquiries under way were in excess of the Bureau's 18-month target age limit by an average of 18 months and some by as much as 43 months. Because the value of evidence gathered diminishes over time, such delays reduce the ultimate effect of the inquiries. To overcome this problem, the Bureau was implementing a new monthly reporting system intended to enable management to identify delinquent cases and the reasons for delay, and to take appropriate corrective action.

7.143 A major reason for the delays was the practice of moving officers to different inquiries in accordance with shifting case priorities. Although the Director has little discretion in selecting cases for inquiry, the assigning of priorities and allocation of resources among inquiries are within the Bureau's discretion and decisions, such as whether to proceed with a certain case, whether to postpone one in favour of another, and whether to devote more resources to a case must be made regularly. However, no clear guidelines had been developed to assist managers in making such decisions. As a result, there was no assurance that all relevant factors were considered consistently and systematically. This situation increased the risk that scarce investigative resources were not being used cost-effectively.

7.144 Although we recognize that there may be difficulties in establishing firm guidelines, a more formal process for decision-making on the selection and

continuation of inquiries could improve the quality of such decisions and contribute to the reduction of the current backlog of cases. A 1979 report commissioned by the Bureau recommended that a checklist of factors be addressed before an inquiry is started so that all relevant factors are considered before decisions on inquiry selection are made. These recommendations had not been implemented.

7.145 *To help ensure that investigative resources are allocated cost-effectively, the Bureau of Competition Policy should develop clear guidelines for assigning priorities and allocating resources among inquiries, including a checklist of factors to be addressed before an inquiry is started.*

Marketing Practices Branch

7.146 The objectives of the Marketing Practices Branch are to protect consumers and businesses from unfair marketing practices and to promote confidence in the market system. The Branch examines more than 9,000 complaints each year of which approximately 2,200 result in completed investigations with an average expenditure of 6.7 person-days. In addition, the Branch conducts information visits to explain to corporations what is required of them under the unfair marketing practices provisions of the Combines Investigation Act. Given the large volume of relatively similar cases, Marketing Practices Branch is more amenable than combines investigations to standardized control procedures.

7.147 The Department's internal audit group completed a review of the Marketing Practices Branch in April 1980. The major issues identified by the study were the need to clarify the Branch's objectives, making them more precise, and to consider the appropriateness of the Branch's case selection procedures as a means of gaining the full benefit of its enforcement activities. The report's recommendations have been addressed by the Branch and managers have developed an enforcement strategy for case selection that identifies priority or problem areas. An enforcement strategies task force has been established, and specific target areas are now identified in work plans.

7.148 In the area of efficiency, we found that the Branch had refined its method of efficiency measurement as a result of recommendations contained in the internal audit report. However, we found that, in the method of measuring efficiency, Branch management was giving equal weight to complaints examined, completed investigations and information visits, when in fact the time required to perform these tasks varied. In addition, the Branch had not developed work standards for each type of activity. As a result of these deficiencies, fluctuations in the reported efficiency of operations could not be assessed.

7.149 *The Marketing Practices Branch should develop work standards for complaints examined, investigations completed and information visits completed, and should use them in measuring the efficiency of its operations.*

Bureau of Consumer Affairs

7.150 In 1978, as part of the Study of Procedures in Cost Effectiveness (SPICE), we conducted a review of the regulatory activities of the Legal Metrology, Consumer Products and Product Safety Branches and reported our findings to the Department. At the time, these branches together accounted for 87 per cent of Bureau staff and 75 per cent of expenditures. A summary of our observations was presented as a case study in the 1978 Report chapter on evaluating effectiveness. Our current audit of the Bureau concentrated on reviewing the progress made since that time.

7.151 In 1978, we reported that the objectives and sub-objectives of the regulatory branches were generally clear, although most were not documented or formally approved. We also reported that, although the majority of sub-objectives were stated in measurable terms, the objectives in the Consumer Products Branch and the Weights and Measures Division of the Legal Metrology Branch were not. Our current audit revealed that the Weights and Measures Division and the Consumer Products Branch had translated their objectives into measurable terms.

7.152 The SPICE report indicated that the Bureau had been unable to develop and use reliable indicators of its program's effectiveness in reducing the economic loss to buyers and sellers resulting from inaccurate meters and weighing devices and misrepresented products, notwithstanding management's attempts to develop and use several such indicators. We found that the measures in the Weights and Measures Division and the Electricity and Gas Division remained unchanged. Further, the Weights and Measures Division has been relying on a manual system after discontinuing its computerized information system because of inaccurate and unreliable data and untimely reports. However, the Branch had approved plans for 1981-82 to determine information requirements of its divisions and develop appropriate systems to meet them.

7.153 The Consumer Products Branch had developed a revised measure of effectiveness called Dollars at Risk, which is the economic loss to consumers arising from product misrepresentation cases discovered through inspection surveys. The Branch was also developing a new computerized system, for completion in 1981-82, to collect and report data on program effectiveness.

7.154 At the time of SPICE, management of the Product Safety Branch did not have an accurate picture of the nature and extent of the problem of keeping hazardous products off the market in Canada, even though it was monitoring accident data from the United States to identify potential problems. We found that Branch management was developing, for implementation in 1981-82, a system to be known as Product Accident Alert Canada to acquire, analyse and report information for use in establishing priorities and evaluating the effectiveness of its activities. The proposed system is intended to provide quarterly reports on specific categories of accidents based on information collected.

Payroll Costs Management

7.155 The Personnel Branch is responsible for providing a complete personnel administration service to all managers in the Department. For 1980-81, the Personnel Branch was assigned 63 person-years and a budget of \$1.6 million.

7.156 Our audit of the Personnel Branch included a follow-up of the recommendations made to the Department on human resource planning and training as a result of our government-wide audit, reported in the 1979 Report, and a review of the human resource information system implemented since.

7.157 Human resource planning. Every organization should have some form of plan for meeting its human resource requirements, including identification of future needs to accomplish its objectives. We found that, with one exception, corrective action had been taken on weaknesses which we identified in our study of human resource planning in CCA. Procedures for human resource planning had been developed, documented and implemented. Program objectives had been annually reviewed and updated. We found, however, that there was no basis for ensuring that human resource plans adequately reflected operational needs.

7.158 *The Department should develop procedures to ensure that human resource plans adequately reflect operational needs.*

7.159 Training. In response to our earlier recommendations, the Department had taken appropriate action to meet training needs. The Department had developed and implemented a planning process for training, and procedures for controlling most training costs and budgets. Training results were evaluated well and responsibility for co-ordinating training had been clearly established. However, we found that individuals' training needs were not being met until funds had been provided in the following year's budget, resulting in delays of a year or more before training was taken. Therefore, the total training cycle, including evaluation of results, could take more than two years.

7.160 *The Department should improve co-ordination of training plans and the budgeting process to prevent delays in training needs being fulfilled.*

7.161 Human resource information systems. We found that the human resource information system implemented did not meet all of the criteria set out in our 1979 annual Report. The system was being used primarily by the Personnel Directorate; it was not relied on by line managers, who had developed their own manual systems. This situation existed because the Personnel Branch had not adequately identified the needs of all potential users of the system.

7.162 *The Department should establish the current and future needs of its managers for personnel information and adapt the human resource information system to meet their needs.*

Information for Parliament

7.163 Many of the improvements in management systems recommended in this chapter would produce information for the revised Estimates and Public Accounts being developed under the direction of the Comptroller General. When we refer here to the departmental Estimates, we mean the new expanded departmental documents that will each be bound separately from the Blue Book for use by Members of Parliament in the Standing Committees which review the departmental Estimates. Copies of the first pilot revisions for four departments, which are called Program Expenditure Plans, were tabled by the President of the Treasury Board and distributed to all Members of Parliament early this year.

7.164 This section outlines some features of the Consumer and Corporate Affairs program which, in our view, should be highlighted in the revised Estimates so that Members of Parliament can better assess the Department's requests for resources, allocation of resources and accomplishments from the use of resources. The observations are included also to give the Department an opportunity to assess the readiness of their management information systems to provide better information for Parliament.

7.165 **Legal mandate and responsibilities.** The department is responsible, in whole or in part, for some 60 Acts and more than 170 sets of regulations. Listing the major Acts and sets of regulations as well as proposed changes in legislation that are before the House would enable Members of Parliament to appreciate the legislative and regulatory context in which the Department works. The services available to the public should also be described.

7.166 **Program objectives and effectiveness.** The Department recently embarked on a four-year review of opportunities to simplify its regulations and to determine whether objectives are being met. A brief summary of the Department's plans for this review along with some key milestones would be useful to Members of Parliament, who would be interested in the progress of the study and any long-term expenditure implications arising from it.

7.167 More work is required to develop specific objectives or results expected of each program so that they can be related to the resources requested. Where feasible, clear objectives and measurable targets for the Estimates year should be provided in the Estimates to create a specific basis for subsequent accountability in terms of results achieved.

7.168 Organization for program delivery. Disclosure of organizational relationships is a key feature of the revised Estimates of CCA because, as well as the Deputy Minister, there are other order-in-council appointments in the Department, for example, the Director of Investigation and Research. In addition, the Estimates should describe the relationship of the Department to the Restrictive Trade Practices Commission, as well as to the several other departments whose ministers share responsibility with the Minister of Consumer and Corporate Affairs for specific statutes, such as the Canada Dairy Products Act or the Fish Inspection Act. It should be made as clear as possible who is accountable for what.

7.169 Resource justification. The Estimates should include reference to factors that influence the need for resources. A substantial part of the Department's resources are needed to deal with repetitive matters like inspections, patent applications and bankruptcies. The resources needed for these operations should be explained in terms of the number of inspections by type, the average cost per inspection and the frequency of inspection. The quality and level of service to be provided with a given level of resources should also be defined. Some of this information is already available in the Department, but, as noted earlier in the chapter, there are still major inadequacies.

7.170 Revenue. In total, Consumer and Corporate Affairs recovers about one-third of its expenditures as receipts credited to the Consolidated Revenue Fund. The revenues for some particular functions, such as Patents and Corporations Branches, exceed direct expenditures. The revised Estimates should disclose the basis for these charges; for example, whether the fee for a patent application is intended to cover the costs of processing that application. Whenever fees are set to cover expenditures, they should be disclosed in the activity section of the new Estimates along with resource justification. Information on fee schedules set on some other basis should be displayed as supplementary information in the revised Estimates.

Summary of Recommendations and Department's Comments

Recommendations

Department's Comments

Planning

7.46 The Department should ensure that branch managers identify, analyse and use information on environmental and other factors relating to their programs in developing branch plans and priorities.

The creation of a new Bureau of Policy Co-ordination, effective 1 October 1981, will enhance our ability to undertake and make available to branch managers research and analysis of environmental determinants of departmental workloads, of its effectiveness and of the achievement of its main objectives over time.

Performance Measurement

7.50 In its review of performance measurement systems, the Department should ensure that the output measures reflect the different work content of all activities and take into account major changes in work procedures.

Agree. The Department is currently reviewing its performance measurement systems.

7.51 The Department should refine the form and content of Bureau quarterly reports to ensure that information is presented in a more concise manner with meaningful explanations of changes in performance.

Agree. Quarterly reports are currently under review.

Effectiveness Evaluation

7.56 The Department should ensure that its objectives are translated into operational terms that will facilitate measurement, where feasible, of the extent to which departmental programs contribute to these objectives.

A program evaluation unit will be put in place in the Bureau of Policy Co-ordination. The program evaluation policy has been adopted by the departmental Management Committee and a plan is currently being developed.

Recommendations

Department's Comments

- 7.61** As part of the implementation of the program evaluation plan, once it is developed and approved, the Department should undertake evaluation assessments aimed at identifying those program components for which evaluation studies can be reasonably implemented and cost-justified.

Bureau of Corporate Affairs

Bankruptcy Branch

- 7.81** The Bankruptcy Branch should consolidate the results of trustee audits and monitoring to identify the areas of bankruptcy administration that need improvement.

The Branch agrees with the recommendation, but its implementation will depend largely on a full study of its feasibility and usefulness.

- 7.89** The Bankruptcy Branch should ensure that its records of trustees' fees and expenses are accurate and utilize this information to assess the appropriateness of the current tariff and, if warranted, propose revisions.

The Branch has already taken corrective action to ensure that trustee's fees and expenses are accurately recorded in its information system.

- 7.94** The Bankruptcy Branch should identify abuses to be prevented and their magnitude, and establish the priority for addressing them.

The Branch agrees with the recommendation, but its implementation will depend largely on a full study of its feasibility and usefulness.

Recommendations

Department's Comments

- 7.100 The Bankruptcy Branch should ensure that its performance measurement system utilizes units of output that are representative of the total Branch workload and provides for regular comparisons of results against standards or plans.

The Branch agrees that a complete review of its performance measurement systems should be made with the view of providing more reliable indicators of its performance in terms of both efficiency and effectiveness.

Corporations Branch

- 7.107 To determine Branch priorities and personnel needs and to provide a basis for developing appropriate management systems for planning, controlling and evaluating its activities, the Corporations Branch should:

- clearly identify the users of corporate information supplied by the Branch and the nature of their needs;

A study has been completed on a sample basis to determine in very broad categories the users of our corporate data base, and the kind of information requested has also been tabulated. This was done in order to ensure that our semi-automated information system contains relevant data and to support, for policy purposes, policy initiatives with respect to the dissemination of corporate information. Similar studies will be conducted periodically.

- determine the availability of corporate information from sources other than the Branch; and

A study will be commenced at the earliest opportunity to be completed by the end of the fiscal year.

Recommendations

Department's Comments

- determine the degree of non-compliance with the disclosure and filing requirements under the CBCA.

At present, we are measuring certain non-compliance rates (i.e. annual summaries, annual returns and financial statements) and the Branch will now include insider trading reports and prospectuses and other documents required to be filed. Information collected will be related to priorities and other aspects of management planning.

7.113 The Corporations Branch should document exemption criteria and the procedures for the review of exemption applications and monitor their use.

The Corporations Branch does intend to document the exemption criteria and the procedures for the review of exemption applications. During the year 1980-81, two exemption information kits on financial statements (subsections 157(4) and 154(3) CBCA) were prepared for the clients. We are aware of the need in this area, and the Branch plans to complete this documentation by the end of the fiscal year.

7.116 To improve its efficiency measurement procedures, the Corporations Branch should ensure that all key Branch outputs are represented in efficiency calculations and that major changes in the work procedures and work content of all activities are taken into account.

As part of the mandate for the re-organization of the Branch, improved efficiency and effectiveness measures will be developed that will more accurately reflect the activities of the Branch and attainment of goals.

Recommendations

Department's Comments

Patents Branch

7.127 In implementing its new management information system, the Patents Branch should ensure that:

- performance measurement of all major operational activities is included;

As a result of an in-depth study of Patent Office operations and procedures carried out in 1980, the Office put in place, on 1 April 1981, a performance measurement and planning system based on 53 operational activity elements. This system aids first line managers in the day-to-day management of their units and is used to roll up performance information, by operational activities and organizational sub-divisions, to higher levels. Work has begun to automate this system over the next two years.

- quality standards, when fully developed, are used in planning and monitoring Branch productivity; and

In July 1981, a Quality Assurance Unit was established, with a staff of three patent specialists, and assigned the task of identifying issues relating specifically to the development of quality standards with the Patent Office.

As quality standards are developed, these will be used in planning and monitoring productivity throughout the Office. It is intended that the Quality Assurance Unit should be in a position to begin establishing and controlling quality standards by April 1982. At that time, the establishment of quality standards will be used in conjunction with efficiency measurement standards in the planning and monitoring of the examination activity. One of the tasks which the Quality Assurance Branch will undertake during 1982-83 is the analysis of the relative work content involved in obtaining a disposal through abandonment compared with that of a disposal obtained through allowance.

Recommendations

Department's Comments

- productivity measurement takes into account changes in the examination work content and in the mix of various Branch outputs.

The Management Information System, implemented by the Patent Office in April 1981, provides performance information down to the level of 53 planning elements, identifying inputs, outputs and current workloads in each area. Productivity standards have been established against which to compare the results of routine activities. This information system now enables the Branch to identify the impact on performance of changes in both work content and mix of outputs within the Branch. In the patent examination and classification activities, a Quality Assurance Unit has been established to identify issues, including changes in nature and complexity of work, relating to quality and to determine how these should be reflected in performance standards for professional staff. While the examination work content has been adjusted recently as a result of the introduction of the preliminary examination report, for example, the consequences of this change are still under review, and the historical standard used for efficiency comparison will be adjusted once the review has been completed, not later than April 1982.

- 7.133** During its review of objectives, the Patents Branch should ensure that criteria are developed to determine the most appropriate trade-off between potentially conflicting objectives.

The Patent Office will, during its review of objectives, attempt to assess the extent of any possible conflict between such objectives. Depending on the results of this assessment, the Office would, if necessary, develop criteria to determine the most appropriate trade-offs between any potentially conflicting objectives. The ability of the Office to conduct this assessment effectively will, as noted, be largely dependent on proposed changes in patent legislation being passed.

Recommendations

Department's Comments

- 7.134 In conjunction with its review of objectives, the Patents Branch should try to determine, within cost-effective limits, ways of measuring the impact of the Patents Program.

Changes in patent legislation are being proposed to make available pertinent data on the economic and technological impact of patents in Canada. The present unavailability of such data notwithstanding, the Patent Office will begin, during 1982-83, to evaluate the appropriateness, feasibility and cost-benefit of establishing procedures to determine the amount of innovation in Canada attributable to its efforts. Additionally, alternative ways of obtaining relevant information for assessing the effectiveness of the Patents Branch programs will be identified and examined.

Bureau of Competition Policy

- 7.140 The Bureau of Competition Policy should translate its objectives into operational terms and use these as a basis for ranking and conducting inquiries and for evaluating the Bureau's success in meeting them. It should clearly assign responsibility for effectiveness measurement and reporting.

The Bureau has developed and is in the process of improving a performance measure based on the quantity, quality and impact of inquiries, and this measure can be used in part to rank projects in terms of priorities as well as to evaluate performance among branches and for the Bureau as a whole over time.

- 7.145 To help ensure that investigative resources are allocated cost-effectively, the Bureau of Competition Policy should develop clear guidelines for assigning priorities and allocating resources among inquiries, including a checklist of factors to be addressed before an inquiry is started.

The guidelines for the assignment of priorities and allocation of resources among inquiries have been developed and are now being more formally integrated into the Project Impact Statements currently in use in the Bureau.

Recommendations

Department's Comments

7.149 The Marketing Practices Branch should develop work standards for complaints examined, investigations completed and information visits completed, and use them in measuring the efficiency of its operations.

Work standards (in the form of models) have been established for complaints examined, investigations completed and information visits completed and are monitored by management. In addition, the cost of carrying out each of the above elements of work on a per unit basis is now costed and compiled quarterly to enable management to assess the efficiency of its operations.

Payroll Costs Management

7.158 The Department should develop procedures to ensure that human resource plans adequately reflect operational needs.

The Department is implementing a more integrated approach to personnel management. This will ensure that personnel administration objectives are directly related to operational objectives and plans.

7.160 The Department should improve co-ordination of training plans and the budgeting process to prevent delays in training needs being fulfilled.

More emphasis on timely and objective performance evaluation and the introduction of review committees will ensure that individual and occupational group training needs are identified and dealt with as soon as possible.

7.162 The Department should establish the current and future needs of its managers for personnel information and adapt human resource information system to meet their needs.

The Department is currently involved in integrating the two major personnel information systems into one. The new human resource planning system includes determining the needs, both immediate and long-range, of managers in this area.

DEPARTMENT OF FISHERIES AND OCEANS

DEPARTMENT OF FISHERIES AND OCEANS

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DEPARTMENT OF FISHERIES AND OCEANS

The Department

8.1 The Department of Fisheries and Oceans (DFO) is responsible for a wide range of activities including fisheries management and research in coastal and inland waters, fisheries economic development and marketing, international fisheries negotiations, oceanographic research, hydrographic surveying and charting, and the development and administration of fishing and recreational harbours.

8.2 The main legislative base for the Department is the Department of Fisheries and Oceans Act (*S.C. 1978-79, c.13*), which established the Department in April 1979, and the Fisheries Act, which was enacted in 1867 in accordance with the responsibility for "sea-coast and inland fisheries" placed on the federal government by Section 91(12) of the British North America Act. Under the Fisheries and Oceans Act, the Department is also responsible for co-ordinating government policies and programs respecting oceans. The "Fisheries" and "Oceans" components of the Department have evolved independently of one another.

8.3 The strategic objectives of the Department of Fisheries and Oceans, as published in the DFO 1979-80 annual report, are to assure:

- the comprehensive management of Canada's fisheries resources through the protection, rehabilitation and enhancement of individual fish stocks and the aquatic habitat upon which these resources depend;
- the "best use" of fisheries resources, through a variety of measures affecting when, where, how and by whom these resources are harvested, processed and marketed to obtain highest possible social and economic benefits;
- the acquisition and dissemination of knowledge of oceanic processes and environments so as to support activities related to defence, marine transportation, the exploitation of offshore energy resources, and the management of the fishery resource and its aquatic habitat;
- hydrographic surveying of Canada's coastal and inland waters for the production of nautical charts and other information necessary for safe navigation;
- the provision of a national ocean information service;

- the provision and administration of a national system of harbours in support of commercial fishing vessels and recreational boating; and
- the conduct of a range of international activities in both the fisheries and oceans sectors.

Resources

8.4 The 1980-81 Estimates present the following summary of the Department's authorized person-years and expenditures:

<u>Program</u>	<u>Authorized Person-years</u>	<u>Expenditures</u> (thousands of dollars)
Fisheries Management and Research	4,146	\$ 306,610
Ocean Science and Surveys	<u>1,358</u>	<u>68,863</u>
Total	<u>5,504</u>	<u>\$ 375,473</u>

Organization

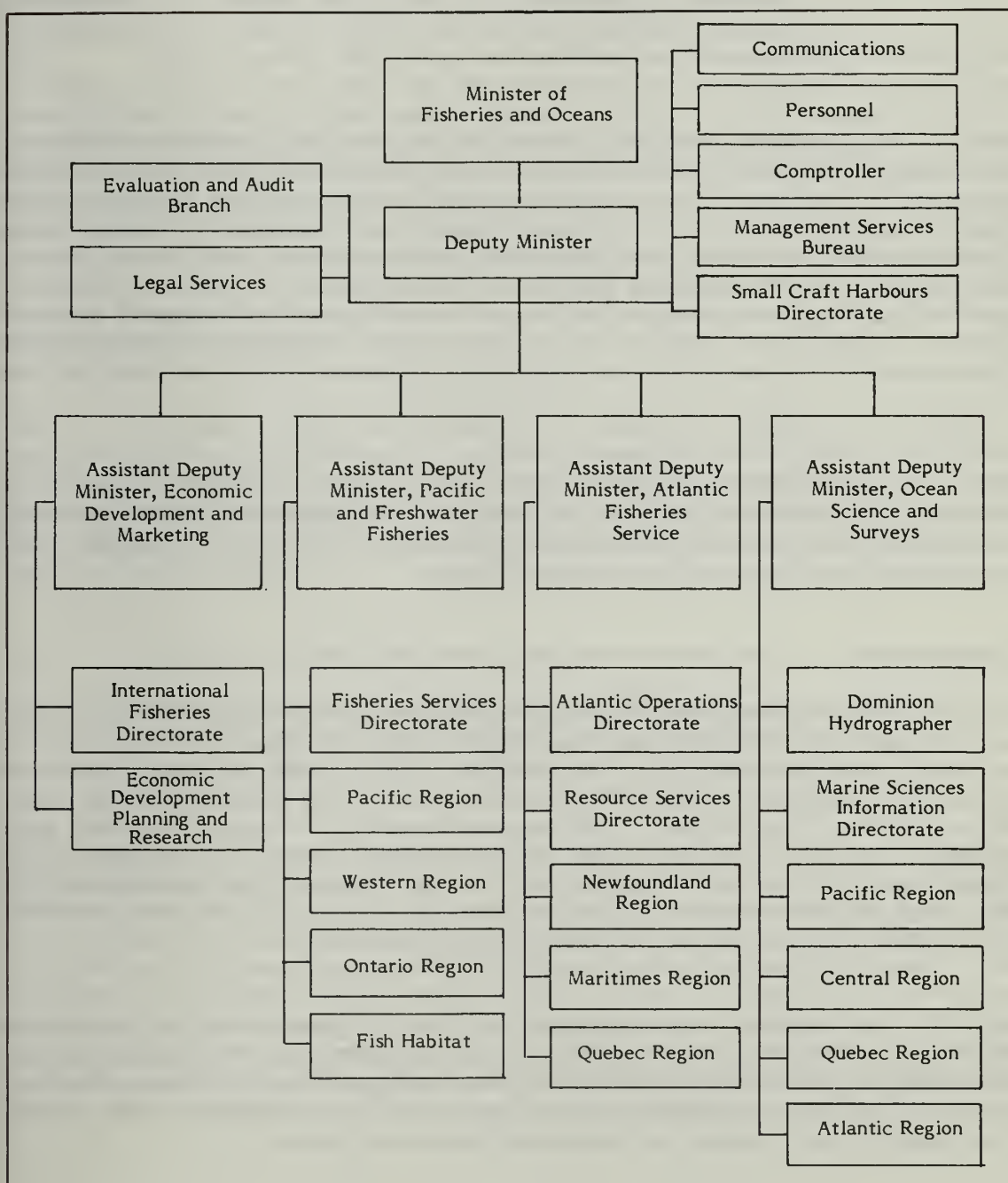
8.5 The Department of Fisheries and Oceans has two major programs: Fisheries Management and Ocean Science and Surveys. There are, in addition, several organizational units that provide support services and control functions. These include the Comptroller's Office, Management Services, Legal Services and the Evaluation and Audit Branch. A summary organization chart is presented in Exhibit 8.1.

8.6 Small Craft Harbours is a separate directorate reporting directly to the Deputy Minister.

8.7 Within the Fisheries Management Program, activities are organized according to geographic considerations and the national nature of certain activities. There are three assistant deputy ministers (ADMs) in Fisheries whose responsibilities are as follows:

- The ADM Atlantic Fisheries is responsible for fisheries management east of the Quebec-Ontario border and has national responsibility for fisheries research and fish inspection.
- The ADM Pacific and Freshwater Fisheries is responsible for fisheries management west of the Quebec-Ontario border as well as in the Arctic. Responsibilities also include the provision of

DEPARTMENT OF FISHERIES AND OCEANS
SUMMARY ORGANIZATION CHART - 31 MARCH 1981



national direction in the areas of resource rehabilitation, enforcement, native affairs, and enhancement and fish habitat management.

- The ADM Economic Development and Marketing is responsible for providing a focus for comprehensive policy development and for formulating a co-ordinated departmental approach to the economic development of the Canadian fishing industry. The scope of these responsibilities extends, on a national basis, to marketing, fishermen's assistance, the conduct of international fisheries relations and economic policy, research and statistical services.

8.8 One assistant deputy minister has responsibility for the Ocean Science and Surveys Program. Like Fisheries, this program area is highly decentralized; headquarters provides policy direction and advice while regional institutes undertake oceanographic and hydrographic research and surveys. Charts, sailing directions, and tide tables are published by the Canadian Hydrographic Service. The Ocean Science component provides a broad range of ocean information to clients including other federal departments (for example, Transport, National Defence, Energy, Mines and Resources, Indian Affairs and Northern Development, Environment), the academic community and the growing Canadian ocean industry sector.

8.9 The Minister of Fisheries and Oceans is also responsible to Parliament for the activities of two Crown corporations: the Freshwater Fish Marketing Corporation and the Canadian Saltfish Corporation, as well as for a departmental corporation, the Fisheries Prices Support Board.

Environment

8.10 The extension of fisheries jurisdiction to 200 miles in 1977 has resulted in the Canadian fishing industry making a larger contribution to the national economy than ever before. The primary and secondary fishing industries contributed about \$1.0 billion to the economy in 1977. By 1980, this had increased to more than \$1.6 billion. The value of exports, in turn, increased from \$0.82 billion to \$1.27 billion during the same period, making Canada the world's largest exporter of fish. Employment in the industry now exceeds 100,000 fishermen and plant workers. Many of these jobs are in areas and communities where there are few alternative employment opportunities.

8.11 In Canada, no single agency or level of government has jurisdiction over all aspects of the fishery system. Under the British North America Act, the federal government has jurisdiction over the management of the fishery resource, harvesting, and inter-provincial and international trade. Provinces have jurisdiction over the type, number and location of processing plants.

8.12 Because fish stocks that had become depleted before 1977 have now, in most instances, dramatically recovered, the Department has been taking a number of steps to improve further the resource base and to increase the contribution to the economy of the fishery sector. For example, emphasis is being placed on improving fish quality as a means of extracting additional value from a limited resource. The quality improvement program involves every stage of the production process, from the water to the supermarket. The Department is also considering further expansion of a program for the enhancement of salmon species on the Pacific Coast.

8.13 The economic and social environment within which the Department functions is heavily influenced by the responsibility to allocate equitably the benefits flowing from this renewable, natural resource. The Department's clients, whether commercial, recreational or native fishermen, inshore fishermen or offshore trawlermen, sealers or conservationists, fish processing executives or fish consumers, all have widely varying opinions on the degree to which the resource should be used and how the economic benefits flowing from its use should be distributed. Thus the Department's role in relation to Canada's fishing industry must be clear and understood by all parties involved. Furthermore, it is essential that the Department have adequate economic analyses when making decisions that affect different groups.

8.14 Decision making concerning the allocation of benefits from fisheries resources is strongly influenced by regional disparities in the rate of economic development and employment. These considerations must be balanced against the tendency for too many people and too much capital to flow into the fishery. If left unchecked, this tendency can result in diminished benefits for an excessive number of participants.

8.15 For example, the Department has set an objective:

to create the conditions necessary for a viable and stable commercial fishing sector and improved incomes, through regulation of harvest levels and by implementing licencing and allocation measures and through research, development assistance and quality programs.

The fishing industry is composed of two primary sectors: inshore and offshore. The great bulk of fishermen are inshore fishermen who operate small boats, fixed gear and traps, and are usually able to fish for only short periods of time. The inshore fishery, by its very nature, is seasonal because of poor weather conditions in winter and increased availability of fish in inshore waters in summer. The offshore fishery operates year round; however, there is a tendency for deep-sea trawlers to catch their quotas as fast as possible rather than lose their historical proportionate share to competitors. Thus, both sectors are prone to take too much fish too quickly, with resultant poor quality fish, huge inventories surpassing demand and depressing price, and idle periods after quotas are caught.

8.16 The Department operates in close liaison with over 20 other federal government departments and with the provincial and territorial governments. As well, the Department maintains contacts with its counterparts in the other major maritime nations and in related international bodies.

8.17 International relations, trade, and development functions are important elements in both the fisheries and oceans sectors. The Department negotiates foreign access to surplus Canadian fish stocks through bilateral and multilateral agreements that include reciprocal provisions guaranteeing the Canadian fishing industry access to certain foreign markets.

8.18 The Department is heavily dependent on reliable scientific data for decisions on quotas and allocations. It has, therefore, allocated over 60 per cent of its fisheries research budget to scientific resource assessment. Scientific information is developed to permit fisheries managers to set allowable catches at levels that will ensure a larger average size of fish, improved catch rates and greater stability of catches from year to year.

8.19 In oceanography, the recent expansion of offshore energy-related activities has resulted in an urgent need to upgrade abilities to make predictions concerning ice, temperature, currents, tides and waves. This information is vital to safe and effective development of offshore and frontier energy resources and the transportation of these resources to markets. Professionals such as economists, oceanographers and other scientists, together with inspection and conservation specialists, are required to carry out these functions so there is a need for careful planning to meet human resource requirements and training of personnel for current and future needs.

8.20 Each of these environmental factors, some largely beyond the Department's control, has a significant effect on DFO's operations. Because of the decentralized nature of the Department's operations, it is imperative for good management control that there are mechanisms in place to gather and provide accurate, reliable, timely, and useful information on a national basis concerning the conduct and results of the Department's various operations. It is also important that the Department plan and co-ordinate its activities on a national basis.

Audit Scope

8.21 Our audit covered both programs of the Department - Fisheries Management and Ocean Science and Surveys. The two programs operate independently; however, we reviewed the following activities that are of a department-wide nature:

- strategic planning;
- effectiveness measurement;
- support services;
- cost recovery; and
- information for Parliament.

8.22 In addition to these department-wide areas, we concentrated our efforts on the Fisheries Management Program since it accounted for 80 per cent of the Department's expenditure in 1980-81. We examined the systems in place to plan, operate, control and evaluate the major activities of the Fisheries Management Program including the determination of whether, in fact, they were functioning in the prescribed manner. The major activities were:

- fisheries research;
- economic analysis, statistics and fisheries assistance programs;
- fisheries operations, including allocation, inspection, licencing, regulation, surveillance and enforcement, and enhancement; and
- operations of the Small Craft Harbours Directorate.

8.23 Within the Fisheries Management Program, we concentrated on the Atlantic fisheries since they account for approximately 70 per cent of the program's expenditures. On the West Coast, we directed our work mainly toward the Salmonid Enhancement Program.

8.24 In Ocean Science and Surveys, we reviewed the systems for planning and controlling oceanography and hydrography.

8.25 In our reviews of oceanography and fisheries research, our audit was conducted in conjunction with the government-wide audit of research and development, reported in Chapter 2 of this Report. We did not address the technical performance of research and development work. Hence, our research and development observations and recommendations should not be regarded as commentary on the scientific quality or results of the Department's research and development activities.

Summary of Audit Observations

8.26 In our opinion, for most functions and programs we reviewed, the Department planned and managed its resources in a satisfactory manner; however,

there were weaknesses of sufficient importance to warrant the Department's immediate attention. The following is a summary of the major observations arising from our audit work.

8.27 Effectiveness measurement. Although the program evaluation group in DFO is new, it has completed some evaluations, and progress appears to be satisfactory. With respect to clarity of objectives, the Department did not have objectives that were sufficiently precise to allow for measuring effectiveness, and it had not completed a profile of the components of program evaluation for its programs, as required by Treasury Board. Such profiles can help to establish the accountability of program managers and serve as a useful tool in the evaluation of programs.

8.28 In the Salmonid Enhancement Program, we found that the procedures in place to measure the effectiveness of the program were generally satisfactory, but that analyses were needed where conditions existed that could affect cost-benefit decisions.

8.29 Fisheries research. The research activities of the Fisheries Management Program were, in general, well managed, except for the allocation of resources for research. The Department had not used its mechanisms for establishing priorities for optimal research effort.

8.30 Economic development. Fisheries Management's economic development activities are composed of economic analysis, statistics and the fishermen's assistance programs. Weaknesses existed in the management of contributions paid under the Fishing Vessel Assistance Program since payments were made without respecting the accepted criteria applying to such payments. Further, contributions were being paid toward the cost of constructing replacement fishing vessels at a time when the overall fishing fleet possessed excess capacity. With respect to economic analysis, which is a major input into the allocation of fish stocks and the determination of enhancement and assistance activities, we found that, although the amount and quality of the analysis was improving, weaknesses still existed. This was particularly true of the analysis dealing with the activities of East Coast inshore fishermen.

8.31 Allocation. The allocation process is important to the management of fish stocks. The Department had ensured that scientific advice was given to fisheries managers. With this advice, and in consultation with other interested parties, the Department has been able to set total allowable catch limits that have permitted stock regeneration. However, there were two weaknesses in the allocation process. The Department had not clearly defined the socio-economic objectives for the process and had not developed a method for making trade-offs between conflicting objectives. For example, the objective to create a viable and stable fishing industry could conflict with the objective to increase fishermen's incomes. We also noted that the consultative process involved in developing, implementing and enforcing management plans for the allocation of fish stocks

was becoming increasingly costly. Cost-benefit studies of alternative methods of allocation had not been carried out.

8.32 Enforcement. The Department's surveillance and enforcement responsibilities were increased dramatically with the introduction of the 200-mile limit in 1977. In our opinion, the surveillance activities applying to offshore enforcement were being managed adequately; however, there were weaknesses in inshore surveillance and enforcement. For example, in operational planning, priorities had not been established concerning the effort to be devoted to various species. Further, the Department did not have a system to provide management with appropriate information on inshore surveillance and enforcement activities.

8.33 Inspection. The Department adequately managed the inspection of imported products and of products, like canned salmon, requiring mandatory inspection. In other parts of the program, however, there were deficiencies. The Department had not determined, on a general basis, what level of inspection effort should be undertaken. As a result, although it had valid statistical sampling techniques, they were not applied on either a consistent, uniform basis to all products or on a directed basis to those plants and products where the greatest risks of health hazards existed.

8.34 Enhancement programs. The Department's enhancement programs are designed to enhance natural fish stocks by using a number of techniques, including constructing and operating hatcheries and spawning channels and fertilizing lakes. The West Coast program, the Department's main enhancement effort, was generally well managed. The East Coast program, however, has, in our opinion, been operated without due regard for economy and efficiency. For example, there were several uneconomic and inefficient hatcheries, including three in close proximity serving the same river.

8.35 Small Craft Harbours. We identified weaknesses in the planning process for Small Craft Harbours. For example, there was no approved national plan covering the short and long-range development of these harbours. Furthermore, there were no criteria for establishing project priorities on a national basis and no guidelines for identifying when projects required cost-benefit analyses.

8.36 Ocean Science and Surveys. In the Ocean Science and Surveys Program, we examined oceanography and hydrography and concluded that both activities were reasonably well managed. However, in oceanography, which is primarily a research function, the Department needs to develop guidelines for preparing project proposals and criteria for selecting new research projects.

8.37 Cost recovery. The Department has not effectively implemented a cost recovery system for services provided to specific individuals or groups. In Small Craft Harbours, rates for the use of harbour facilities had not been changed

since 1973 and did not reflect the cost of supplying the service. We estimate that, by maintaining the same rate structure since 1973, the Department has foregone approximately \$5 million in revenues. In other areas, such as ships and the operation of Bait Depots, the Department had not effected the cost recoveries required by Governor in Council. This situation has resulted in an estimated revenue loss of approximately \$2 million a year.

8.38 Support services. The management of support services within the Department was generally weak. There were major deficiencies with respect to human resource planning, human resource information systems and training. There were also serious deficiencies in the management of electronic data processing due to the absence of a documented national policy or long-term plan and a national EDP security plan. We also observed inadequacies in certain aspects of materiel management and financial management, while the effectiveness of the Internal Audit Division was reduced by the lack of an active Internal Audit Committee.

Observations and Recommendations

Strategic Planning

8.39 The purpose of strategic planning is to establish and review an organization's basic direction and fundamental goals and its strategies for achieving these goals. Before 1980, the Department's major effort in strategic planning was contained in a 1976 White Paper which focused on Canada's Commercial Fisheries. In accordance with requirements of the Ministry of State for Economic Development, the Department prepared a 1980 Strategic Overview that reviewed the direction and objectives of the entire Department. An improved and updated version of the Strategic Overview was issued in 1981.

8.40 The Department has instituted other planning initiatives that are linked to the Strategic Overview. For example, National Plans, covering most of the major functions, have been developed. These National Plans are detailed expansions of the Strategic Overview. Also, in accordance with Treasury Board requirements, the Department has introduced multi-year operational planning which covers a five-year period and quantifies the resources required to meet the objectives set out in the Strategic Overview and National Plans.

8.41 DFO has made a major effort to improve planning by implementing new systems for strategic and operational planning. The various planning processes -- the Strategic Overview, the National Plans, and the multi-year operational plan -- were not as complete or as integrated as they should have been; however, the Department was aware of the areas requiring improvement and is addressing them.

Effectiveness Measurement

8.42 Program evaluation. The Evaluation Group of the Evaluation and Audit Branch of DFO is responsible for conducting and reporting effectiveness evaluations of the Department's programs. During 1980-81, the Group had six person-years and a budget of approximately \$400,000. The Group is still in the formative stages of development but has plans to evaluate all departmental programs. Our audit included a detailed review of the Group's structure and management and the evaluations planned and conducted to date.

8.43 In 1980, an evaluation policy was issued, outlining the roles and responsibilities of the Evaluation Group and the Evaluation Committee. At the same time, a five-year schedule of evaluation was approved. We reviewed the policy and schedule and found both to be satisfactory.

8.44 The Group has completed evaluation studies for all four programs in the first year of the evaluation schedule. Evaluation assessments, or pre-evaluation planning documents for the five programs in the second year of the evaluation schedule, had been completed, and work was under way on the actual evaluation studies of these programs. We reviewed two of the studies completed in the first year and four of the five assessments for the second year of the evaluation schedule.

8.45 In 1981, Treasury Board approved a "Guide on the Program Evaluation Function". This and other recently available supporting documentation have helped to provide direction for evaluation activities in departments and agencies. However, because evaluation functions are expanding rapidly throughout government, there is a shortage of adequately trained and experienced personnel.

8.46 We found that evaluations studies and assessments were of uneven quality, and some evaluations had fallen behind schedule. We noted, however, that the group has made definite progress toward planning and conducting evaluations in a manner that satisfactorily reflected the requirements of both the Treasury Board Guide on Program Evaluation and our audit criteria for effectiveness measurement and reporting.

8.47 The Department was aware of the problems encountered by the Evaluation Group in its early years of operation and was attempting to consolidate its initial progress by filling vacant positions with experienced personnel, and following even more closely Treasury Board guidelines on planning and conducting program effectiveness evaluations.

8.48 The Evaluation Group is responsible for conducting effectiveness evaluations of all programs at least once every five years. In addition, individual program managers are responsible for having appropriate procedures in place to

monitor continuously the extent to which their programs are achieving the desired effects or objectives. An important step in being able to measure program effectiveness is to have clear program objectives.

8.49 To determine the degree to which there were satisfactory procedures to measure program effectiveness, we examined the systems in place in the Atlantic region to measure the adequacy of control over the access to the fisheries resource. The licensing process determines which people and which vessels have the right to fish. The allocation process takes the total allowable catch in a year and divides it up among various user groups. Taken together, these two activities determine who catches what fish and under what circumstances.

8.50 We examined the 1981 Atlantic Groundfish Management Plan as the major example of the allocation process. This allocation plan allocates approximately 60-65 per cent of the total Atlantic catch. In 1980, this catch was valued at \$227 million.

8.51 The task of specifying precise objectives for the allocation process is difficult. Only from the mid-1970s on were effects like economic benefits and social well-being explicitly taken into account in fisheries management. Previously, only biological aspects, such as the maximum numbers of fish that could possibly be taken, were considered important. Time is needed to conduct analyses and establish information systems to manage the fisheries resource with an appropriate level of understanding of its socio-economic characteristics and effects. In some areas, this type of information has only recently become available for use by fisheries management.

8.52 Although progress has been made in clarifying the Department's socio-economic objectives since the mid 1970s, we concluded that the objectives of the Atlantic licensing and allocation activities were not sufficiently precise. For example, licensing has a major effect on the income of fishermen and the Department has included "to improve incomes" among its objectives for the licensing program. It might be expected that precise targets, such as the average industrial wage or a set poverty line, would be used to make such an objective clearer.

8.53 Further, the objectives of the 1981 Atlantic Groundfish Management Plan included the improvement of incomes and the maintenance and enhancement of the economic viability of coastal communities. Economic viability can be expressed using more precise terms, such as a specified proportion of a community's income or employment derived from the fishing industry. Clearer objectives concerning income are possible and necessary to permit measurement of program effectiveness and to hold managers to account for program performance.

8.54 The Department had not completed a program evaluation component profile of their programs as required by the Treasury Board's Guide. These profiles include the objectives of a program and a statement of its intended impacts and effects. Profiles can help establish the accountability of program managers and can be useful in evaluating the effectiveness of their programs, especially in key functions, such as licensing and allocation that control access to and allocation of the fishery resources.

8.55 *The Department should ensure that program evaluation profiles are completed for all programs.*

8.56 **Salmonid Enhancement Program.** The Department has expended significant effort in defining and measuring the objectives of the Salmonid Enhancement Program. This program uses various enhancement techniques to achieve its target of doubling the number of salmon available on the West Coast of Canada. When these fish are caught, the Department assumes that socio-economic benefits will accrue with respect to national income, regional development, native people, employment, and resource and environmental preservation.

8.57 We selected three enhancement projects at Chilliwack, Puntledge and Tlupana Inlet that had been completed and were representative of the cost-benefit methodology that was applied to all the enhancement projects. We reviewed the assumptions that were made and the types of data and information used in these selected projects.

8.58 The procedures to measure the effectiveness of the Salmonid Enhancement Program were generally satisfactory. However, our examination revealed some problems with the available data because they varied in quality or accuracy, and some of the assumptions were at wide variance with what was most likely to occur. For example, catch data or allocation of catch to different user groups such as sports fishermen or American fleets were known to be subject to some error. Also, the Department based the estimated benefits of the enhancement programs on an assumed level of fish survival and catch rates. Although some level must be assumed, departmental experience has shown that these survival and catch rates can vary by as much as a factor of two. When these assumptions and data are used in cost-benefit analysis, they raise serious questions concerning the validity of the cost-benefit ratio that determines whether a project will or will not be undertaken. Finally, with respect to the validity of some assumptions, the Department assumed no increase in the capitalization of the fishing fleet. It is reasonable, however, to expect that some capitalization, like increasing capacity, will occur. This increase in the fleet's capitalization cost would result in a less favourable cost-benefit ratio for the projects concerned.

8.59 Typically, when data that are subject to a significant amount of error or that may change over time are entered into a cost-benefit ratio, several ratios are prepared based on alternative, but likely, scenarios. The Department has

conducted this type of sensitivity analysis for the selected variables on the Puntledge River project and for future prices for salmon on all projects.

8.60 *The Department should carry out further sensitivity analyses where assumptions and data are subject to a significant degree of fluctuation that could significantly affect the outcome of the cost-benefit ratio.*

8.61 The general methodology used for the Salmonid Enhancement Program could be applied to other projects in the Department. Initiatives are already under way to expand it to the areas of enforcement, regulation and conservation on the Pacific coast.

8.62 *The Department should determine the feasibility of applying the effectiveness methodology of the Salmonid Enhancement Program to other departmental programs.*

Fisheries Research

8.63 Within Fisheries Management, responsibility for research is extensively decentralized. The field organization includes a total of six regions, each with a regional headquarters. There are nine research establishments. The cost of research for 1980-81 was approximately \$50 million, with over 800 person-years directly associated with fisheries research.

8.64 We reviewed the management systems and procedures for planning and controlling research and development activities. Our review was designed to assess the adequacy of the systems and procedures for ensuring that the Fisheries Management Program managed its research activities economically and efficiently.

8.65 Managing the fishing resources requires intensive scientific effort to determine the best level of resource harvesting to ensure conservation and regeneration while, at the same time, permitting maximum socio-economic returns. To fulfil its mandate, the Department has embarked on a comprehensive program of resource assessment and analysis for the principal species of interest.

8.66 The Department's procedures for estimating the size of stocks are based on scientific and statistical methodology established originally in the early 1970s and improved subsequently. The Department has well developed procedures in this regard; however, because of extensive, natural variability in populations for some species, the reliability of the data for these species is not as good as it is for others.

8.67 There are research programs directed toward long-term understanding of the behaviour of various species and the inter-relationship between species. However, within the Fisheries scientific community, there is considerable concern that the emphasis on obtaining accurate stock assessments has been at the expense of long-term research. In certain species, the lack of research is becoming a problem for effective long-term management of the resource and for international negotiations.

8.68 We noted an apparent imbalance in the resources allocated to various species, if the level of resources devoted to certain species is compared to the current and future benefits provided by these species. We realize, however, that the allocation of research resources reflects public perceptions of need for service as well as historical patterns. For example, substantial research, habitat and enhancement effort has been devoted to salmon on the Atlantic coast. A departmental study indicated that, in 1978-79, the Maritime region expenditures, including research and enforcement, amounted to 29¢ for every \$1.00 of fish landed in that region. For salmon, the amount spent was at least \$12.60 for every \$1.00 of fish landed. The Department had not carried out analyses to determine what would be an appropriate level of expenditure to devote to each species.

8.69 *The Department should carry out studies to determine how its research and enforcement efforts should be allocated.*

Economic Development

8.70 The Economic Development Directorate of Fisheries and Oceans is responsible for economic policy development, fishermen's assistance programs and marketing and international agreements. Our audit covered economic policy development and fishermen's assistance programs.

8.71 **Economic analysis.** Economic analyses are essential input for a wide range of departmental activities. They are used in developing economic policy, allocating fish quotas and evaluating and designing fishermen's assistance programs.

8.72 In the Newfoundland region, a number of studies had been made of certain fisheries and the financial performance of some fleet segments. However, these studies had been made of large vessels and restricted fisheries like shrimp and crab while the vast majority of the fleet, the small inshore vessels in the Atlantic region, had yet to be studied. The Newfoundland region is planning a survey of the inshore fleet during 1981.

8.73 Although the Department had made progress in improving the quality and range of its economic analyses, further improvement was required, particularly in the area of the Atlantic coast inshore fleet. Without adequate analysis on

the inshore fleet, it is difficult for the Department to make key decisions on allocation or to evaluate fishermen's assistance programs which are often designed to help inshore fishermen. For example, the Department allocated 60 per cent of northern cod to the inshore fleet without any quantitative analysis of the trade-off between employment, fish quality, income improvement, stability, economic efficiency and allocations to other fleets.

8.74 *The Department should ensure that its economic analyses are expanded, particularly for the East Coast inshore fleet.*

8.75 **Catch statistics.** Statistics on catches serve as input for a number of different activities. They are used in fishery research to develop the total allowable catch, in the allocation process to allocate fish quotas, and in economic analysis to establish fishermen's incomes and to monitor fish quotas. They are published monthly and annually as public information and are used in international negotiations.

8.76 Because catch statistics are used for such a variety of purposes, there are conflicting and competing requirements for the same data. For example, in managing quotas, it is essential that the data are timely. When developing total allowable catch numbers, however, researchers require accurate data on what was caught and from what locations; timeliness of data is not a major concern. As a result of these different information requirements, there have been a number of data systems developed.

8.77 The Department was aware of the problems in trying to produce data that are both timely and accurate. There had been a number of attempts to resolve the problems at headquarters and in the regions. Nevertheless, the problems of duplication of effort, lack of timeliness, inaccurate data and uncoordinated efforts by different regions still remained.

8.78 *The Department should review the present system for compiling catch statistics to ensure that it meets the needs of its users in the most cost-effective manner.*

8.79 **Fishermen's assistance programs.** We reviewed the major program designed to provide assistance to fishermen, the Fishing Vessel Assistance Program.

8.80 This program was originally intended to increase the productivity and efficiency of Canada's fishing fleets by providing fishermen with financial assistance for constructing new vessels and modifying existing vessels. Since its inception in 1942, the objectives of the program have expanded to include helping independent fishermen, and generating employment in shipyards and related

industries. For the fiscal year ended 31 March 1979, expenditures totalled \$10.7 million and provided for the construction of 763 new vessels and the modification of 22 others.

8.81 Our review of the Fishing Vessel Assistance Program indicated that the program did not operate with due regard for economy or efficiency. A major problem in the East Coast fisheries has been excess capacity of the fishing fleet. The results of a study, commissioned by the Department and published in October 1979, indicated that the program had aggravated the situation by subsidizing the construction of vessels with greater catch capacities. The same study concluded that the program had had the effect of increasing the price of all fishing vessels, although only one in three newly constructed vessels was subsidized. This has created a potential conflict with other departmental programs.

8.82 The controls over the operations of the program were inadequate. We found a number of instances where the Department's eligibility criteria and financial controls were not followed. For example, 45 files contained no evidence that the vessels had been inspected during construction or that they were insured. Although the regulations require that the vessel must be involved in fishery activities for a number of years after replacement, none of the 67 files reviewed contained reports on subsequent fishing activity. The Department's published eligibility criteria were all violated at least once.

8.83 *The Department should enforce its eligibility criteria and controls for the Fishing Vessel Assistance Program.*

Fisheries Operations

8.84 Fisheries Operations covers a wide range of activities such as allocation of fish stock, regulations, surveillance and enforcement, inspection, and enhancement of fish stocks. In 1980-81, Fisheries Operations employed over 1,700 person-years.

8.85 **Allocation of fish stocks.** The allocation process is the key activity in the stocks management process because the Department's ability to allocate fish stocks among fishermen and regions gives it substantial power to control economic returns. It is during the allocation process that fisheries managers set catch quotas for various species.

8.86 The process begins with the provision of scientific advice to the departmental managers on a "best catch" quota to determine the most appropriate balance between maximum harvesting and ensuring the conservation and regeneration of fish stocks. Once the research advice has been given, advisory committees develop draft fishing management plans. The preparation of the plan is generally based on scientific advice, past allocations, management policy and

available economic analyses. The fishing management plan prescribes the total allowable catch by species for various geographic sectors, types of equipment and fishermen. An important part of the process in the past has consisted of consultation with various interested and affected groups.

8.87 However, our audit disclosed two weaknesses in the allocation process. First, as discussed previously under the heading Effectiveness Measurement, the Department had not defined clearly enough its socio-economic objectives with respect to the allocation of stocks. Similarly, the Department had not formally established priorities for, or developed trade-offs between, objectives when conflicts arose or where it was clearly not feasible to attain all the objectives.

8.88 A second weakness in the allocation process pertained to a lack of information on the economic and social effects of alternative allocation methods. We observed that the process of developing and implementing the management plans was becoming increasingly costly. We could not find evidence of cost-benefit studies of the consultation process or of alternative approaches for developing management plans, such as the method employed by the U.S. government whereby the fishermen's representatives make the allocation.

8.89 *The Department should undertake studies of alternative methods of allocation of fish stocks, where feasible.*

8.90 We also found problems in the co-ordination of specific fishery management plans developed in the allocation process with other departmental programs, particularly regulatory and licensing enforcement activities. Although many of the plans attempted to allocate existing fish stocks in a manner that would achieve a stable level of harvesting capacity, other programs either continued to permit expansion of existing harvesting capacity or permitted new entries into the fishery.

8.91 For example, the Fishing Vessel Assistance Program has, as noted previously, exacerbated the capacity problem. In addition, although the Department's fishing plans were based, in many instances, on a cut-off of limited entry licences, we found situations where, in 1980, licences in the Maritimes for limited fisheries for groundfish, herring and scallops continued to increase. The increased capacity thus generated tended to put more pressure on stocks that were, in some cases, fully utilized.

8.92 Although fishing management plans called for a commercial salmon fishing ban in New Brunswick, which ended in 1981, and for compensation payments of \$1.5 million per year to be paid to commercial fishermen, bycatch and poaching of salmon, according to the Department, substantially defeated the purpose of the ban. Bycatch refers to fish caught while fishing for other species permitted under licence.

8.93 *The Department should ensure that all its programs and activities relating to fish management are properly co-ordinated to minimize conflict with each other.*

8.94 **Licensing.** Most major fisheries are controlled through the use of commercial fishing licences. In general, these major fisheries have limited entry licences, meaning that no further expansion of the fishery is allowed.

8.95 The Department lacked consistent and clearly stated licensing policies that covered ownership, utilization and transferability. Without such policies, regions have developed their own approaches that are confusing to fishermen and departmental officials alike. For example, on the West Coast, most licences can be transferred; on the East coast most cannot. The East coast regions also have different approaches to ownership. The Department could not give us any clear rationale for these differences.

8.96 A second weakness with licensing is that the Department has regulations that cover some, but not all, aspects of licensing. In 1981, the Department had to make an out-of-court settlement with a fisherman because, in the opinion of the Department's own lawyers, a licence could not be denied by policies that were not defined in regulations.

8.97 *The Department should develop general principles and policies on licensing that cover utilization, ownership and transferability and should establish regulations covering these principles and policies.*

8.98 **Regulations.** The Department issues regulations under the authority of the Acts that it administers. Procedures for issuing and amending regulations were inadequate to ensure that regulations were issued promptly when required. For example, the regulations covering the 1981 Atlantic Groundfish Management Plan were not promulgated by January 1981.

8.99 *The Department should issue regulations on a timely basis.*

8.100 **Surveillance and enforcement.** Historically, surveillance and enforcement activities have been directed toward traditional inland and inshore species such as salmon or lobster. During the 1960s and early 1970s, offshore stocks were managed by the International Commission for the Northwest Atlantic Fisheries of which Canada was a member. In 1977, when the 12-mile limit was extended to a 200-mile fishing zone, the responsibilities and complexities of surveillance and enforcement activities were altered dramatically. Canada assumed the sole responsibility for the direct management of a number of inshore and offshore fish stocks such as cod, herring, hake, halibut and redfish. The Department responded to this new role by introducing a number of measures, including foreign fishing

limitations, licensing requirements, gear limitations and management plans to conserve and augment fish stocks.

8.101 The Department's surveillance and enforcement activities are divided into two areas, offshore and inshore. The Department has adequately managed its offshore surveillance and enforcement activities. Since 1977, it has instituted a number of techniques, including on-board observers, aircraft surveillance, vessel boardings and a computerized information system that ensure that both foreign and domestic offshore fleets comply with regulations.

8.102 There were weaknesses, however, in the management of inshore surveillance and enforcement activities. Operational planning was weak because the Department had not established priorities or specified the desired level of effort for each species and the allocation of resources between enforcement activities and other duties such as licensing, data collection, public relations and so on. The person-year and equipment requirements, and hence the cost of enforcement, varied considerably among species. Without priorities, it was not possible for the Department to set appropriate enforcement practices or to establish accurate budgets.

8.103 *The Department should establish priorities as part of its operational planning system for inshore surveillance and enforcement activities. These priorities should be used in the operational planning process to determine how surveillance and enforcement effort should be distributed among the different fish species and among other activities, such as licensing and data collection.*

8.104 Since inshore surveillance and enforcement cover a wide range of activities, it is important that the Department have an information system that records where resources are being spent. The Department did not have a management information system that covered inshore activities. Such information is essential in setting regional and area operational plans and in comparing actual results against plans.

8.105 *The Department should ensure that it has appropriate information on the way in which inshore surveillance and enforcement efforts are being expended.*

8.106 **Inspection.** The fish inspection program is designed to protect the public from health hazards and fraud. The Department uses over 400 person-years and an annual budget of \$10 million to inspect some 1,300 processing plants. The inspection program has seven main components:

- vessels and vessel landings;
- unloading, handling and transportation;

- plant registration;
- inspection of plant operations;
- product inspection - grading;
- product inspection - health, safety, minimum quality; and
- product inspection - imports.

8.107 Several aspects of the fish inspection program were adequately managed. The Department's approach to products requiring mandatory inspection, such as canned salmon, or to products with export certificates was based on assessment of key processes and statistically valid sampling techniques. Approximately 40 per cent of production requires mandatory inspection. The Department adequately managed the inspection of imported fish products by ranking countries and products and concentrated its effort on those areas with the greatest potential hazard. Annual plant surveys were also carried out adequately.

8.108 For approximately 60 per cent of the production that does not require mandatory inspection, sampling for inspection was not done on a statistically valid basis, and the Department had not determined the appropriate level of inspection. The Department is planning to rate plants; this is the first step in the effort to set the level of inspection.

8.109 *The Department should develop criteria for categorizing hazard levels in all plants and facilities and, to aid in setting levels of inspection for each plant, the Department should apply these criteria to rate the plants and facilities it inspects.*

8.110 *The Department should develop statistically valid sampling and inspection plans for all fish plants and products it inspects.*

8.111 The Department has an operational performance measurement system for inspection; however, this system was not being used because a number of regions found the output inappropriate to their needs. Consequently, it did not have access to accurate and timely information necessary for planning and controlling inspection activities.

8.112 *The Department should ensure that appropriate and timely information is available to meet the needs of inspection management.*

8.113 Fisheries and Oceans has two major initiatives under way that affect inspection. The first is a major evaluation that is to be completed early in 1982.

The second is the Quality Improvement Program, aimed at improving the overall quality of Canadian fish products. It is too early to determine what results this new program will have, but the initial plan indicated that it may correct some of the weaknesses in the current fish inspection program by improving fish handling, introducing grades of fish and requiring processors to implement quality control programs.

8.114 Enhancement. Fisheries and Oceans enhances natural fish stocks on both the East and West coasts by a number of techniques such as hatcheries, spawning channels and lake fertilization. On the West coast, enhancement is a major element of the Department's operation under a program approved by Cabinet in 1977. On the East coast, enhancement activities are carried out on a considerably smaller scale.

8.115 The Salmonid Enhancement Program on the Pacific coast is intended to generate economic, social and environmental benefits through contribution to national income, regional development, employment, well-being of native people, and environmental preservation goals of Government. It applies fish culture technology to Pacific Salmonid species. One of the aims is to restore and preserve the historical levels and distribution of salmon by species and stock.

8.116 The Program is being carried out in two phases with the long-term objective of contributing to the Government's national and other goals by increasing the salmonid production by up to 150 million pounds per year. Phase I, the first seven years, has the objective of constructing fish hatcheries and other facilities capable of producing an additional 50 million pounds of salmonids each year at a cost of \$150 million. Phase II will have variable annual salmonid production targets based on the attainment of the Government's current economic and social objectives.

8.117 The Program is administered by a Salmonid Enhancement Program Directorate which reports to the Minister of Fisheries and Oceans through a Salmonid Enhancement Board.

8.118 Our review of the Salmonid Enhancement Program included an examination of the overall planning process, financial management, the planning and acquisition of major production facilities, an assessment of the program evaluation procedures, reported earlier in this chapter, and the reporting on hatchery operations. Our examination did not extend to a review of the inter-relationship between the Salmonid Enhancement Program and other West coast activities such as stock management, regulations, licensing and enforcement.

8.119 Our summary conclusions are that the Salmonid Enhancement Program has developed sound systems for planning, for the acquisition of capital assets and for financial management.

8.120 The Program's strategic and operational plans were integrated and were based on extensive studies, user input and management review. These plans clearly identified the total program costs and anticipated outputs. The cost-benefit analyses of individual projects used assumptions and data generally in line with Treasury Board guidelines. Project selection criteria had been established to ensure proper selection and to maximize technical, social and economic benefits for the Program.

8.121 Our examination of four of the five major completed construction projects indicated that projects were selected on the basis of a study of alternatives and an analysis of costs and benefits. The projects were well planned and managed. The Directorate, however, had not developed a system to review and report on completed projects. Such a review would compare actual to planned, actual to average, or some other standard of performance of costs, time and engineering quality. Because no review system was in place, the Directorate could not ensure that strengths and weaknesses of projects were identified and dealt with appropriately.

8.122 *The Salmonid Enhancement Program Directorate should develop and implement post-project evaluation procedures to ensure that strengths and weaknesses of projects are identified and used to improve the management of future projects.*

8.123 The Salmonid Enhancement Program is at a stage of transition. The initial major construction projects have only recently been completed; their operation and maintenance are now becoming the major activity of the Directorate.

8.124 There was a general lack of formal and uniform systems for collecting data and reporting on the operations of the enhancement facilities. Although extensive data were collected and numerous reports produced, we found a lack of clear, concise summary reports on performance. For example, we did not find concise reporting on how soon full utilization of total production capacity would be reached and the extent to which the current output was ahead or behind schedule. There were no production standards against which performance could be monitored, nor was there any form of standard costs that could be used for evaluating the cost effectiveness of individual facilities.

8.125 *The Department should develop production standards, standard costs and clear, concise performance reports.*

8.126 The Department's financial management and reporting system has been modified by the Directorate to meet the requirements of the Salmonid Enhancement Program. These changes, however, have not been documented. The Directorate has introduced various modifications and improvements to the

Department's financial management and reporting system; for example, variance analyses and reports were being prepared and followed up on a quarterly basis. These changes have been made independently of the Comptroller's Branch at headquarters. Without documentation of the new procedures and reporting requirements, there has been no transfer of knowledge to the other regions or branches within the Department. This lack of documentation could also cause problems if there were to be a turnover of the staff involved in the Program's financial management function.

8.127 *The Department should ensure that all changes to the financial management and reporting systems are first reviewed by the Comptroller's Branch and documented.*

8.128 The Department operates 12 hatcheries in the Atlantic region to enhance salmon and trout. The hatcheries require a staff of 54 and an annual budget of \$1.9 million.

8.129 The hatchery system demonstrated lack of due regard for economy and efficiency. There were several uneconomic and inefficient hatcheries. For example, there were three hatcheries in close proximity serving the same river. The Department has acknowledged that economies could be achieved by closing at least one hatchery.

8.130 Our review of departmental documentation indicated that the hatchery situation had been evident to the Department for several years, and the situation had not been resolved.

8.131 *The Department should rationalize the present system of hatcheries with a view to improving economy and efficiency.*

Small Craft Harbours

8.132 The Department has responsibility for the operation and management of a national system of approximately 2,400 fishing and recreational harbours, most of which are located on the East coast, and the administration of related federal property, leases, licences and agreements. This Program has had annual funding of approximately \$35 million for the last six years, and the total value of the facilities is estimated by the Department to be \$1.5 billion. Expenditures at individual harbours can range from nil to millions of dollars.

8.133 The Program is implemented through the Small Craft Harbours Directorate in Ottawa and six regional offices. Approximately 70 per cent of the budget, the bulk of which is allocated for fishing harbours, is expended on the East coast. The Small Craft Harbours Program varies significantly from one region to

another. For example, in British Columbia, the emphasis is on harbour management; in Newfoundland, construction and upgrading of facilities are the main concerns. Our examination was designed to determine whether the Department's acquisition and management of Small Craft Harbours demonstrated due regard for economy and efficiency.

8.134 Planning. We noted considerable user participation in identifying regional needs and thus in contributing to the development of regional plans. However, there was no approved comprehensive national plan for the Small Craft Harbours Program, and projects identified by the regions and submitted to Headquarters for approval were not ranked in order of priority on a national basis by Headquarters to ensure that available resources were allocated to individual projects in order of importance. The present system of relatively consistent allocations to regions did not ensure that resources were used in a way that would provide the greatest socio-economic benefit.

8.135 *The Department should develop a system for ranking projects in order of priority on a national basis to ensure allocation of resources based on greatest need.*

8.136 Project studies and review. There have been no written guidelines established to determine when socio-economic studies used to define the need for projects should be conducted. There was considerable variation among the regions as to when such studies would be conducted.

8.137 The Department does not require post-completion reviews of projects. There was no documented identification of implementation strengths to be carried forward or of weaknesses to be avoided in future projects. Escalation costs were not clearly segregated from increases or decreases due to changes in the scope of the work. All of these are needed to improve the estimating and/or control of future projects.

8.138 *The Department should establish guidelines for identifying those projects requiring socio-economic studies and should ensure that post-completion reviews are carried out for major projects.*

8.139 Harbour administration. Rates charged for services and use of facilities, as set out in the Fishing and Recreational Harbours Regulations, have not been changed since the responsibility for Small Craft Harbours was transferred from the Department of Transport in 1973. There were no procedures in place for the periodic review of rates to ensure their appropriateness. The Branch had made little effort to have original rates changed. Rates in place did not recover or reasonably reflect the cost of providing services and facilities. If the inflation index only had been applied to the rates, they would be at least double what they are now. If the Department had increased its rates each year at the

same rate as the inflation index, the Department would have charged approximately \$5 million more than it actually did using the 1973 rates.

8.140 *The Small Craft Harbours Directorate should carry out periodic reviews of the rates charged for its services and facilities and, where appropriate, recommend changes in rates.*

8.141 **Effectiveness measurement.** The Small Craft Harbours Directorate did not have procedures to measure and report the effectiveness of its program. Management has recognized the need and desirability for measuring program effectiveness. We were informed that, as a by-product of the Small Craft Harbours Evaluation begun by the Department in April 1981, new indicators would be developed.

Ocean Science and Surveys

Ocean Science

8.142 The Ocean Science program, which is primarily a research program in Oceanography, is extensively decentralized. The field organization includes four separate regions, each with a regional headquarters. There are four research establishments. The cost for research in 1980-81 was approximately \$33 million and involved over 750 person-years.

8.143 The purpose of the audit was to determine whether the systems enabled management to carry on research activities with due regard for economy and efficiency and whether there were adequate procedures for measuring the effectiveness of the program.

8.144 The research management systems in Oceanography were basically sound. Oceanography has recently made a number of improvements in strategic and operational planning for research; however, we found several areas where further improvements were required to ensure that full benefits accrue from these initiatives.

8.145 The planning process, initiated only a year ago, lacked specific guidelines about likely levels of funding for research in general and for targeted areas in particular. Further, existing program review and evaluation were not used fully to control the direction of research programs.

8.146 Unlike Fisheries, Oceanography is primarily engaged in basic research. Therefore, project selection is the critical point in the research project cycle where senior management can ensure that the right project is initiated. Since many of the projects continue over several years, it is most important that the

selection process be objective, rigorous, documented and standardized throughout this decentralized program. Although there was an informal system, the Department did not have formal guidelines or selection criteria for documenting, proposing, costing, evaluating, selecting and controlling new research projects.

8.147 *The Department should formalize its guidelines and selection criteria for selecting, controlling and evaluating new research projects, and ensure that these are communicated to all concerned.*

Canadian Hydrographic Service

8.148 The Canadian Hydrographic Service is responsible for providing up-to-date charts and tables of water currents and sailing directions for use by ships sailing in Canadian waters. It operates from a headquarters in Ottawa and four regional offices. The Service currently produces and maintains 1,585 charts. In 1980-81, it utilized 600 person-years and had expenditures of \$27 million.

8.149 Our review of the Service included an examination of the planning and controlling process and the systems in place to ensure efficiency of operations. We concluded that the Service adequately planned and controlled the resources under its direct control. We identified problems with the Service's main reporting system, a system designed to be a chart inventory, production status and time reporting system for all cartography work done by the Service. Discussion with Service officials indicated that they were in agreement with our observations and currently have the system under review.

Support Services

8.150 When DFO separated from the Department of the Environment in April 1979, it had to expand its headquarters support services capability to provide for those services that previously were supplied by the Department of the Environment. At the time of our audit, the Department was still in the process of identifying and correcting deficiencies in its management of support services.

8.151 We reviewed the management systems used in the administration of departmental support services activities. In particular, we examined systems used for financial management, internal audit, electronic data processing, payroll costs management, and materiel and facilities management.

8.152 **Financial management.** Since the Department of Fisheries and Oceans is highly decentralized and the regions operate with considerable independence, there is a need for strong financial planning, functional direction and sound financial systems. In this way, senior management of the Department can have assurance that its financial operations are being properly carried out.

8.153 We found that there were weaknesses in financial planning and systems and a lack of functional direction from headquarters with respect to financial matters.

8.154 To meet its needs after it separated from the Department of the Environment, the DFO established a Comptroller's Branch in August 1979. During our audit, this Branch was in the process of identifying areas of departmental finance requiring improvement and was taking the necessary corrective action.

8.155 One of the areas where weaknesses existed was in the preparation of operational plans, Estimates and budgets. In many areas, there was little involvement by financial officers in the preparation of operational plans and Estimates relating to the 1980-81 fiscal year. Budget requests were not reviewed by financial officers to ensure that they had been properly prepared and contained adequate justification for the resources requested. Budgeting, for the most part, was not based on analysis of needs but was incremental. Subsequent to our examination, the Department has been taking steps to correct these weaknesses and issued detailed instructions for the preparation of the 1981-82 program expenditure plans.

8.156 *The Department should ensure that financial officers are involved in preparing operational plans, Estimates and budgets and that they analyse regional requests to ensure that they are properly prepared and adequately supported.*

8.157 The Branch was not regularly providing financial direction and co-ordination to the regions. Therefore, there was no assurance that financial operations were being carried out adequately and consistently throughout the Department. In addition, the Department had not clearly assigned the responsibility for developing financial systems either to the Branch or to any other group or groups within the Department. For example, because there was no uniform policy for controlling and accounting for moneys for research and development received from the private sector, each region had developed its own system for controlling and accounting for these funds. Effective 1 April 1981, the Comptroller's Branch was given the responsibility for systems development and maintenance.

8.158 *The Comptroller's Branch should give functional direction to departmental financial units and ensure that the development of regional financial systems is properly co-ordinated.*

8.159 **Internal audit.** The internal audit function is carried out by the Internal Audit Division of the Evaluation and Audit Branch. The Division has engaged the Audit Services Bureau of the Department of Supply and Services to perform most of the audits, with the remainder being carried out by public accounting firms.

8.160 We examined the mandate of the internal audit function and the manner in which audits were planned, conducted, reported and followed up.

8.161 To the date of our audit, no operational audits had been completed since the Division's mandate was expanded only in December 1980 to include audits of this type. However, the Division was preparing plans to address its additional responsibilities.

8.162 Although the Audit Committee was established in 1979, it met for the first time in April 1981. We found no evidence that the Committee had reviewed audit planning, audit policies, resource requirements, Internal Audit Report observations and conclusions or departmental action plans to correct deficiencies noted in audit reports.

8.163 *The Audit Committee should give active guidance and support to the Internal Audit Division by reviewing its plans, policies and reports and by ensuring that there is adequate departmental follow-up of major observations.*

8.164 **Electronic data processing.** The major role of electronic data processing (EDP) within the Department of Fisheries and Oceans is to provide the means to collect, organize and disseminate fishery and ocean information and to support scientific research. In 1980-81, the total EDP budget was \$10 million, with 153 person-years devoted to EDP activities.

8.165 We found that there was no national EDP policy, long-term plan or EDP security plan. Therefore, the Department lacked assurance that its EDP operations were being developed in conformity with user needs and plans. The absence of an EDP security plan could result in the Department losing important segments of the information compiled by its computers and being unable to replace these data. This has happened on at least one occasion.

8.166 *The Department should develop a national EDP policy, EDP long-term plan and EDP security plan.*

8.167 **Payroll costs management.** In 1980-81, the Department utilized 5,500 person-years, and its payroll costs amounted to approximately \$153 million.

8.168 We found that the Department had carried out little human resource planning and what human resource plans there were had not been properly integrated with long-term program needs. The Department was therefore running the risk that it would not have the appropriate number of people available with the skills necessary to meet its operational needs.

8.169 There were serious deficiencies in the Department's ability to forecast the future availability of existing human resources. The Department's records of its human resources were not sufficiently complete to enable it to develop an inventory of available skills, nor did it determine turnover rates, retirement rates, career development or succession plans. The Department, therefore, was not in a position to develop action plans to provide for needs based on an analysis of skills or projections of human resource availability.

8.170 *The Department should improve its human resource planning by developing plans that are based on current and future operational needs.*

8.171 The Department did not have a satisfactory training program in that there was no formal identification or assessment of training needs and no formal process for developing courses or programs based on an analysis of needs. Because the Department did not have a national policy covering its surveillance and enforcement activities, regions had set their own recruiting standards and developed their own training programs, and the amount and quality of training for both new and regular officers varied considerably among regions. The Department has recently appointed a national director who is responsible for coordinating national enforcement issues, including recruiting and training.

8.172 The Department was not using performance appraisals to help identify training needs. Existing training and development programs have been developed on an ad hoc basis. They consisted primarily of orientation courses given to new recruits. Courses were selected by individuals on the basis of personal interest, with little or no involvement by the human resources function.

8.173 *The Department should adopt a more systematic approach to identifying employees' training needs.*

8.174 The management of human resources was hampered by the fact that the Department did not have a comprehensive human resource information system. Besides providing classification, salary and other information with respect to employees on strength, such a system could also be used for providing other information such as turnover rates, attrition rates, retirement figures and the dates on which the performance of employees was evaluated.

8.175 *The Department should develop human resource information systems that will provide the information needed by departmental managers for planning, training and other personnel management purposes.*

8.176 **Materiel and facilities management.** The Department has a considerable investment in buildings and other structures and in various types of materiel. We found that, in the past, there had been insufficient attention given to the

management of materiel and facilities but that, at the time of our audit, the Department was identifying and correcting deficiencies.

8.177 We reviewed the management of one building project, vehicles, laboratory equipment, vessels and inshore fish handling equipment.

8.178 Construction of the Northwest Atlantic Fisheries Centre in St. John's, Newfoundland cost \$33 million and took place both before and after the Department of Fisheries and Oceans was separated from the Department of the Environment. Although economies were realized by cost reviews during the construction period, there was a lack of due regard for economy in planning the Centre. Our review of the consultants' design concept proposal, presented during the planning period, disclosed that it was incomplete in some important respects. For example, the estimated costs were in part understated and in part incomplete, with the result that the preliminary estimate was \$8.8 million less than the final estimate. Further, the approval of Treasury Board was later sought and obtained without assessing the extent, if any, that inadequacies affected the validity of the proposal.

8.179 In addition, the Department proceeded with a segment of the second phase of the project costing \$2.7 million on which Treasury Board had placed a ceiling of \$2.0 million. Although the Department received Treasury Board approval to complete the second phase, it did not seek specific authorization to raise the \$2.0 million ceiling to \$2.7 million. The cost of the whole project did not exceed the approved total only because the Department did not construct the project's third and final phase. This third phase was to contain an addition 39,500 net square feet, representing one-quarter of the originally projected floor space.

8.180 *The Department should ensure that project proposals are properly supported by accurate and detailed costs estimates.*

8.181 *The Department should maintain its expenditures within approved Treasury Board limits.*

8.182 In our 1980 annual Report, we stated that, except as noted in paragraphs 2.109 to 2.113, the Department's systems for managing its fleet of vessels were generally adequate. We followed up on these observations and found that these matters had been dealt with adequately. One other matter raised with the Department was not dealt with: this concerns the Department's practice of evaluating major refits on a post-project basis without resolving, either with Treasury Board or the Department of Supply and Services, the latter's failure to include transportation and incidental expenses in evaluating repairs and refit bids.

8.183 In respect of inshore fisheries rehabilitation program equipment, the Department has taken or is taking satisfactory action on most of the matters raised in paragraph 12.3 of our 1980 annual Report. The items remaining relate to the failure to adopt and implement a cost recovery program and also to bill and collect container rentals promptly in accordance with lease terms.

8.184 Cost recovery. In 1978, the Governor in Council set out the requirements for recovering costs of rendering services to others. Contrary to those requirements, the Department has not been recovering any costs with respect to the use of its vessels on behalf of outside organizations. We estimate these costs to be \$1 million a year. Further, in the operation of Bait Depots, only one-half of the recovery required by Governor in Council was being made, with the result that there was an under-recovery of approximately \$1 million in 1980-81.

8.185 *The Department should recover costs in accordance with Governor in Council requirements.*

Information for Parliament

8.186 The Office of the Comptroller General is carrying out a project to improve the form and content of the Estimates and Public Accounts. Fisheries and Oceans has not been involved in the revisions process up to this point, and thus the Department has an opportunity to develop the necessary data base so that costs can be matched to outputs as requested by the Public Accounts Committee. Our purpose here is to present some key features of Fisheries and Oceans programs that should be included in the Department's Estimates when it is called upon to revise its section of the "Blue Book". We make no attempt to provide a complete list of the contents of the revised Estimates but, instead, cover some of the main points where further work may be required and some areas that are particularly important to establishing a basis for accountability.

8.187 Assistance programs administered. The Department administers a number of assistance programs for fishermen; for example, the Fishing Vessel Assistance Program and the Bait Services Program. Operational objectives and results achieved by these programs should be included in the Estimates. A summary table, listing the assistance programs, with specific page references for more details later in the plan, would enable Members of Parliament to find quickly those areas in which they are particularly interested.

8.188 Initiatives. The Department has undertaken a number of recent initiatives such as the Salmonid Enhancement Program, enforcement of Canada's declaration of a 200-mile economic zone, and research in the Beaufort Sea and Hibernia fishing areas where oil exploration is taking place. Disclosure of these initiatives and their financial implications in the revised Estimates would create a context in which Members of Parliament could examine resource needs and establish a basis for subsequent accountability.

8.189 Operational objectives and measures of effectiveness. Members of Parliament are interested in knowing what results a program intends to achieve with the resources requested and how these relate to the program's overall objectives. For example, the resources for the Salmonid Enhancement Program might be related to targets for increased fish stocks and higher catches. Although it is true that the levels of fish stocks and catches are affected by factors beyond the control of the program, some statistics of past trends and future targets, accompanied by a narrative explanation, would give Members of Parliament a partial basis on which to judge the effectiveness of the program. Although difficult to project and measure, information on the specific socio-economic benefits -- national income, regional development, meeting needs of native people, employment, and environmental preservation -- would be even more helpful to Members in assessing program effectiveness. Similarly, specific targets and trends in results for other activities should be included in the Estimates wherever possible.

8.190 Additional ways to justify resource requirements. The information required to justify the level of resources depends on the nature of the activity. In many cases, disclosure of measures of efficiency and levels of service can be useful. For example, in describing recurring functions like field inspection and laboratory tests, the level of resources required could be related to the number of inspections or tests. The resources required for offshore surveillance and enforcement work could be related to the surveillance pattern selected; that is, by disclosing the mix of fixed and variable costs for patrols, the extent to which costs were increased by more frequent patrols would be made clear.

8.191 Resource requirements for research are difficult to justify. Here, Members of Parliament might find useful an explanation of the mechanism used to fix resource levels for research or to select projects. For example, the Estimates could explain that, in the fisheries management activity, the major part of the research effort is devoted to stock assessment and related biological research necessary for the rational allocation of the fish stocks. In the Ocean Science and Surveys activities, most of the research effort is for relatively basic work, and the Estimates could indicate that projects are selected based on peer group, management, and client judgements.

8.192 Capital. The Estimates should demonstrate that capital projects support the objectives of the program and that resources will be acquired with due regard for economy. The requirements for materiel should be defined in such a way that the materiel acquired will enable the user to meet the need for a given service in an economic and efficient manner. The choice among alternative types of materiel should be based on a thorough analysis of the relative costs and benefits. For example, Fisheries and Oceans meets its extensive requirements for ship time by using both charters and its own vessels. The rationale for this strategy should be explained in the Estimates.

8.193 Due regard for economy also requires that decisions on acquisitions or construction consider life cycle costing. For example, the Department has a

program to replace, on a planned basis, older vessels of 6 metres or more in its fleet of 268 ships. The construction of new vessels has important operating implications in terms of future years' financial requirements that should be explained in the Estimates. Similarly, the Department should also explain in its Estimates the life cycle costs of the Small Craft Harbours Program and the Salmonid Enhancement Program.

Summary of Recommendations and Department's Comments

Recommendations

Department's Comments

Effectiveness Measurement

8.55 The Department should ensure that program evaluation profiles are completed for all programs.

Agreed. The departmental evaluation policy requires evaluation profiles, and a project to ensure the preparation of project evaluation component profiles was initiated in June 1981.

8.60 The Department should carry out further sensitivity analyses where assumptions and data are subject to a significant degree of fluctuation that could significantly affect the outcome of the cost-benefit ratio.

Agreed. The planning guidelines currently under development will include appropriate direction.

8.62 The Department should determine the feasibility of applying the effectiveness methodology of the Salmonid Enhancement Program to other departmental programs.

Agreed. The planning guidelines currently under development will include appropriate direction.

Fisheries Research

8.69 The Department should carry out studies to determine how its research and enforcement efforts should be allocated.

Accurate attribution of benefits to specific levels of research and enforcement are impossible to estimate. Pilot projects are used as is the judgment of experienced staff. The Department is aware of the need to ensure that an appropriate level of research and of enforcement is in place.

Economic Development

8.74 The Department should ensure that its economic analyses are expanded, particularly for the East Coast inshore fleet.

Agreed. This is under way.

Recommendations

Department's Comments

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| 8.78 | The Department should review the present system for compiling catch statistics to ensure that it meets the needs of its users in the most cost-effective manner. | Agreed. A project to review and revise the catch statistics system is under way. |
| 8.83 | The Department should enforce its eligibility criteria and controls for the Fishing Vessel Assistance Program. | Agreed. |

Fisheries Operations

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| 8.89 | The Department should undertake studies of alternative methods of allocation of fish stocks, where feasible. | The expanded economic analysis capability (see recommendation 8.74) will permit further analyses to be made. |
| 8.93 | The Department should ensure that all its programs and activities relating to fish management are properly co-ordinated to minimize conflict with each other. | The revision of the planning process and the establishment of consultative and co-ordinating committees is expected to provide the necessary ties between all programs and activities. |
| 8.97 | The Department should develop general principles and policies on licensing that cover utilization, ownership and transferability and should establish regulations covering these principles and policies. | A proposed policy for the Atlantic coast fishery has been made public and comments from interested parties are awaited. The Pearse Commission on the Pacific coast will examine licensing policy as a part of its review of fisheries management. The Commission's report is expected in February 1982. |
| 8.99 | The Department should issue regulations on a timely basis. | Agreed. |

Recommendations

Department's Comments

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| 8.103 | The Department should establish priorities as part of its operational planning system for inshore surveillance and enforcement activities. These priorities should be used in the operational planning process to determine how surveillance and enforcement effort should be distributed among the different fish species and among other activities, such as licensing and data collection. | Reviews of the inshore surveillance activity on the East Coast are planned. The Pearce Commission is expected to address the question as part of its review of Pacific Coast Fisheries Management. |
| 8.105 | The Department should ensure that it has appropriate information on the way in which inshore surveillance and enforcement efforts are being expended. | Agreed. This question will be addressed as part of the IMPAC project on operational indicators. |
| 8.109 | The Department should develop criteria for categorizing hazard levels in all plants and facilities and, to aid in setting levels of inspection for each plant, the Department should apply these criteria to rate the plants and facilities it inspects. | A program evaluation of the inspection program will be completed in December 1981. This recommendation will be considered along with the results of the evaluation when revising the inspection multi-year plan. |
| 8.110 | The Department should develop statistically valid sampling and inspection plans for all fish plants and products it inspects. | Agreed. |
| 8.112 | The Department should ensure that appropriate and timely information is available to meet the needs of inspection management. | Agreed. This question will be addressed as part of the IMPAC project on operational indicators. |

Recommendations

Department's Comments

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| 8.122 | The Salmonid Enhancement Program Directorate should develop and implement post-project evaluation procedures to ensure that strengths and weaknesses of projects are identified and used to improve the management of future projects. | These procedures are being developed and will be tested over the next two years. |
| 8.125 | The Department should develop production standards, standard costs and clear, concise performance reports. | An appropriate project will be included in the Department's IMPAC Action Plan. It is probable, however, that performance standards will be specific within Regions rather than National in scope. |
| 8.127 | The Department should ensure that all changes to the financial management and reporting systems are first reviewed by the Comptroller's Branch and documented. | Agreed. |
| 8.131 | The Department should rationalize the present system of hatcheries with a view to improving economy and efficiency. | A program evaluation of Atlantic Enhancement has been completed. This recommendation will be reviewed in conjunction with recommendations arising from the evaluation. |

Small Craft Harbours

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| 8.135 | The Department should develop a system for ranking projects in order of priority on a national basis to ensure allocation of resources based on greatest need. | This recommendation will be reviewed along with the recommendations arising from the departmental program evaluation currently under way. |
| 8.138 | The Department should establish guidelines for identifying those projects requiring socio-economic studies and should ensure that post-completion reviews are carried out for major projects. | The Department's IMPAC Action Plan will include a project to develop such guidelines. |

Recommendations

Department's Comments

8.140 The Small Craft Harbours Directorate should carry out periodic reviews of the rates charged for its services and facilities and, where appropriate, recommend changes in rates.

This subject will be covered within a revised departmental policy on cost recovery.

Ocean Science

8.147 The Department should formalize its guidelines and selection criteria for selecting, controlling and evaluating new research projects, and ensure that these are communicated to all concerned.

The current guidelines for the review, control and evaluation of existing research projects will be revised to include those for the selection, control and evaluation of new projects.

Support Services

8.156 The Department should ensure that financial officers are involved in preparing operational plans, Estimates and budgets and that they analyse regional requests to ensure that they are properly prepared and adequately supported.

Agreed. Written guidelines were prepared for the preparation of the 1981-82 Multi-year Operational Plan and Main Estimates. Financial Advisers have been established in the Comptroller's Branch and have as a primary responsibility the analysis of regional requests.

8.158 The Comptroller's Branch should give functional direction to departmental financial units and ensure that the development of regional financial systems is properly co-ordinated.

A functional direction policy has been developed and will be implemented as soon as it receives senior management approval (expected in September 1981). The co-ordination of all departmental financial systems is now being achieved through the Financial Policy and Systems Development Division.

<i>Recommendations</i>	<i>Department's Comments</i>
8.163 The Audit Committee should give active guidance and support to the Internal Audit Division by reviewing its plans, policies and reports and by ensuring that there is adequate departmental follow-up of major observations.	The departmental audit committee has been active and playing an appropriate role since April 1981.
8.166 The Department should develop a national EDP policy, EDP long-term plan and EDP security plan.	This project will be part of the departmental IMPAC Action Plan.
8.170 The Department should improve its human resource planning by developing plans that are based on current and future operational needs.	This project will be part of the departmental IMPAC Action Plan.
8.173 The Department should adopt a more systematic approach to identifying employees' training needs.	A draft departmental policy and procedures have been developed and consultations with regions are under way.
8.175 The Department should develop human resource information systems that will provide the information needed by departmental managers for planning, training and other personnel management purposes.	A project has been initiated and will be included in the IMPAC Action Plan.
8.180 The Department should ensure that project proposals are properly supported by accurate and detailed costs estimates.	The planning guidelines currently under development will include appropriate direction.
8.181 The Department should maintain its expenditures within approved Treasury Board limits.	Agreed.

Recommendations

Department's Comments

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| 8.185 | The Department should recover costs in accordance with Governor in Council requirements. | Agreed. Work will be initiated as part of the IMPAC Action Plan to devise appropriate departmental policy direction. |
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**DEPARTMENT OF THE SOLICITOR GENERAL
THE CORRECTIONAL SERVICE OF CANADA**

**DEPARTMENT OF THE SOLICITOR GENERAL
THE CORRECTIONAL SERVICE OF CANADA**

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DEPARTMENT OF THE SOLICITOR GENERAL
THE CORRECTIONAL SERVICE OF CANADA

The Service

Background

9.1 The Department of the Solicitor General was established in 1966 by the Department of the Solicitor General Act. The Act (now *R.S.C. 1970, c. S-12*), extends to the Solicitor General of Canada the duties, powers and functions relating to:

- reformatories, prisons and penitentiaries;
- parole and remissions; and
- the Royal Canadian Mounted Police.

9.2 In 1973, what had been known formerly as Departmental Headquarters was reorganized to perform the functions of a Ministry Secretariat. The Secretariat is headed by the Deputy Solicitor General and is responsible for the development and co-ordination of Ministry policy.

9.3 Policies on police, corrections and parole are determined by the Solicitor General, on the advice of the Deputy Solicitor General and the heads of the Royal Canadian Mounted Police, the Correctional Service of Canada and the National Parole Board, who together form the Ministry's Senior Policy Advisory Committee.

9.4 The Correctional Service of Canada (CSC) is a combination of the Canadian Penitentiary Service established under the Penitentiary Act (*R.S.C. 1970, c. P-6*) and that portion of the National Parole Board known as the National Parole Service. The Commissioner of Corrections is appointed by the Governor in Council under the authority of section 4 of the Penitentiary Act and is responsible, under the direction of the Solicitor General of Canada, for the control and management of the Service, including the custody of inmates and the correctional programs aimed at their satisfactory reintegration into society. In addition, the Commissioner is responsible for justifying and supporting the granting of parole and supervising inmates to whom parole has been granted or who have been released on mandatory supervision.

9.5 The primary objectives of the Correctional Service, as stated in the Estimates, are "to administer sentences imposed by the courts and to prepare offenders for their return as useful citizens to the community."

9.6 Under the provisions of the Criminal Code of Canada, individuals sentenced to less than two years are held in a provincial reformatory or jail. The primary role of the CSC is, therefore, to administer the sentence of the courts with respect to offenders sentenced to two years or more. The Service is also responsible for certain provincial inmates who have been transferred to federal institutions under agreements between the Government of Canada and provincial jurisdictions.

9.7 Opportunities for offenders to prepare for their return to society are provided through social programs such as counselling and day parole and a series of academic and vocational training programs. These activities are supplemented by industrial, agricultural, forestry and other in-house work programs. Some offenders are allowed, through the day parole system, to hold outside jobs as part of their correctional program. All of these programs reflect the emphasis placed by the CSC on minimizing the debilitating aspects of incarceration and strengthening family and community ties.

9.8 A characteristic significant to the operations of the CSC is that management must deal with convicted offenders and has no direct control over who is admitted to or released from the system. The CSC had a complement of approximately 10,000 person-years and a budget of \$426 million for 1980-81 to operate 58 institutions and 73 parole offices across Canada.

9.9 The Estimates give the following description of the CSC's activities:

- Planning and Management - Headquarters, regional and institutional management; development of policy and plans, and monitoring of performance; promotion of good communications and public awareness.
- Custody of Inmates - Security and custodial care of inmates, to minimize the incidence of offenders inflicting harm to the public, staff, other inmates and themselves.
- Education, Training and Employment of Inmates - Promotion of work and training opportunities in industrial, vocational and scholastic programs designed to develop inmates for useful positions in the community as productive and responsible citizens.
- Offender Case Management - Preparation, direction and counselling of inmates aimed at their satisfactory reintegration into society; supervision of inmates released on parole from both federal and provincial institutions; and provision of rehabilitative assistance to parolees and inmates discharged from federal penitentiaries.
- Health Care - Provision of medical, dental, psychiatric and therapeutic treatment for inmates.

- Technical Services - Provision of food, clothing and institutional services; the maintenance of accommodation and plant facilities; the provision of engineering and architectural services.
- Administration - Provision of personnel, finance and general administration services.

Organization

9.10 The CSC operates federal penitentiaries including psychiatric centres, community correctional centres, staff training colleges and parole offices, grouped under five geographic regions. Accountability for accomplishment of program objectives proceeds from the institutional heads to the regional directors general, who report directly to the Commissioner.

9.11 The Commissioner is assisted by a headquarters staff that is organized into branches on an activity basis and is responsible for interpreting the Commissioner's directions through developing, communicating and monitoring the implementation of policies, systems and procedures for the regions and providing related functional assistance to regional management. Similar guidance and assistance is provided to the institutions by regional management. Exhibit 9.1 sets out the organization of the Service in summary form.

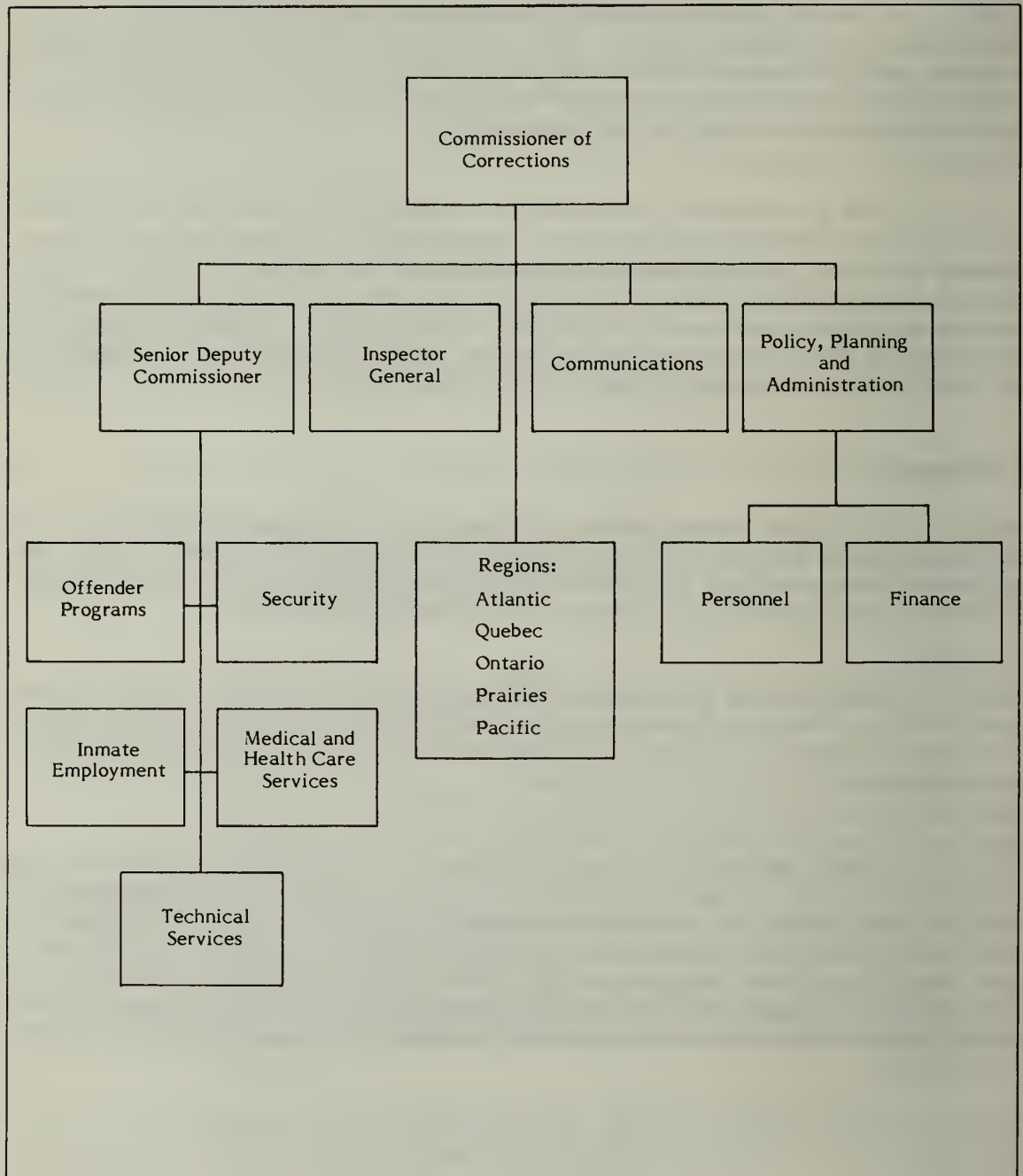
Environment

9.12 The Correctional Service of Canada is an integral component of the criminal justice system, which also includes the body of criminal laws, law enforcement agencies and the courts. Jurisdiction over these various components is divided among federal, provincial and municipal governments.

9.13 Fundamental to the successful direction of the CSC is a well defined and understood mission. However, confronting the CSC and all correctional agencies here and abroad is the basic question of what the ultimate purpose of corrections should be.

9.14 Until the early 1970s, the concept of rehabilitation dominated the field of corrections. However, because of questions raised about the appropriateness of this approach by various authorities, including several Commissions and study groups in Canada, it has given way to alternative approaches. An opportunities model has been adopted by the Service that emphasizes the role of corrections in administering fairly and humanely the sanctions imposed by the courts and, at the same time, providing inmates with opportunities to better themselves.

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9.15 Several major studies have been made of the CSC, usually in response to concerns raised by riots, hostage-takings or other incidents. In 1976, a major report, known as the MacGuigan Report, was submitted to Parliament by the Sub-committee on the Penitentiary System of Canada. The Sub-committee conducted an extensive investigation into the operations of the CSC and concluded that rehabilitation during imprisonment had been largely ineffective and that management processes as well as morale among correctional officers needed significant improvement. The Report's conclusions and recommendations have served as benchmarks for the establishment of priorities and the gradual overhaul of CSC management processes within the limits of resource constraints.

Resources

9.16 The 1980-81 Estimates present the following summary of the Service's authorized person-years and expenditures.

	<u>Authorized Person-years</u>	<u>Expenditures</u> (thousands of dollars)
Planning and Management	254	\$ 10,872
Custody of Inmates	3,260	79,104
Education, Training and Employment of Inmates	649	42,760
Offender Case Management	2,773	83,108
Health Care	503	22,053
Technical Services	1,295	129,470
Administration	995	31,140
Contributions to Employee Benefit Plans	-	27,893
	<u>9,729</u>	<u>\$ 426,400</u>

Audit Scope

9.17 Our examination of the CSC included a review of the major programs and activities of the Service at National Headquarters, in the regions and at the institutions, and assessed the adequacy of procedures to measure and report the effectiveness of programs. We examined the Service's planning processes, its key management and financial controls and accountability reporting, and major support functions.

9.18 Sources of audit criteria included Treasury Board directives and guidelines, CSC's own policies and procedures, standards of the American Commission on Accreditation for Corrections, to which the CSC refers where there are no Canadian standards, and applicable criteria developed by this Office.

Summary of Audit Observations

9.19 Over the past few years the CSC has taken several significant steps to improve the quality and delivery of its programs; for example, it has placed increased emphasis on accreditation of institutions under professional correctional and hospital standards. The CSC has also developed an action plan in response to observations made by the Comptroller General in his IMPAC survey on planning processes, organizational relationships, operational control and internal audit.

9.20 The planning process, comprising strategic and operational planning, has addressed areas of major concern to CSC management and has provided analyses of how these concerns may be resolved and program objectives met. Improvements were still needed, however, in the substantiation supporting annual program work plans.

9.21 The CSC has recently implemented policies and procedures for program evaluation, including effectiveness measurement. Roles, responsibilities and accountability of the program evaluation function were well defined, and satisfactory follow-up procedures relating to program evaluation reports had been approved. At the time of our audit, evaluations of critical areas of the CSC's operations, such as custody of inmates, were just getting under way.

9.22 Security considerations pervade all aspects of the CSC's programs. Procedures governing the operation of the custodial function and the measurement of its effectiveness were well documented and communicated. The CSC has also given high priority in its operational plans to methods by which overtime costs can be reduced.

9.23 In the area of case management, significant progress has been achieved in developing and promulgating policies and procedures through the case management manual. There was still a need, however, to document and implement fully the cascading process for transferring inmates to progressively lower levels of security classification under certain conditions. The lower the security classification, the less the per-person cost of incarceration. Until the CSC implements the process, it will not be able to take advantage of the potential increase in economy and efficiency. The process, moreover, is the means by which the CSC lives up to one of its governing principles, which dictates that no inmate should be kept in a more secure status than potential risk requires.

9.24 There was also significant room for improvement in the identification and documentation of inmates' needs by case management so that the most appropriate available opportunities may be provided. The CSC has done much to develop academic and vocational training and employment programs to promote the acquisition of job skills by inmates and at the same time contribute to defraying the Service's operating costs. However, the CSC had not assessed the degree to which these programs met inmates' needs as identified by case

management. Successful measurement will require close co-ordination of the objectives and priorities of the case management and the education, training and employment activities. Cost accounting for products and services of inmate employment programs also needed to be improved to enable the CSC to measure the degree of success achieved in defraying incarceration costs.

9.25 Although improvements have been made in forecasting and planning for accommodation, the process could be further improved by including cost-benefit analyses and feasibility studies for accommodation projects and formulating clearer relationships between long-term accommodation plans and offender-related programs. As well, increased costs have been incurred during the construction stage of projects and changes have been made in their scope and design without prior Treasury Board approval.

9.26 Our audit revealed a number of deficiencies in the management of materiel. These were all related to the lack of a formal materiel management system to ensure due regard for economy and efficiency in the procurement, storage, use and disposal of goods and services required to meet CSC needs and objectives. The CSC is aware of these deficiencies and has undertaken several corrective measures; for example, it plans to introduce a new comprehensive materiel management manual during 1981-82.

9.27 The CSC has recognized some major problems concerning the lack of both a Service-wide human resource inventory to determine future availability of existing staff and a co-ordinated human resource planning system to forecast the number and type of staff required. There was also need for improvement in the identification of training needs and analyses of how best to meet them.

9.28 In the area of financial management, projects were being undertaken to address problems in financial control and were generally being conducted and completed in a reasonable manner and time frame.

9.29 The CSC attaches great importance to internal audit reports and follows up promptly on observations raised. Although the mandate, reporting relationships and scope of internal audit appeared satisfactory, the quality of documentation supporting audit conclusions needed further improvement.

Observations and Recommendations

Planning

9.30 The planning process in the CSC consists of strategic and operational planning, which together address the long, medium and short-term needs of the Service. The Deputy Commissioner, Policy, Planning and Administration is responsible for the preparation of strategic and operational plans and for monitoring program performance against plans.

9.31 The strategic planning process, which has recently been developed, includes an analysis of significant issues likely to confront correctional managers over the long term (up to 20 years) so they can develop the necessary options for medium (5 to 10 years) and short-range (annual) plans. Examples of these issues are the changing characteristics of the inmate population, such as the increased proportion of offenders serving long-term sentences, and the number of inmates with serious drug and alcohol problems.

9.32 Information on these issues is provided by the Strategic Planning Committee, which acts as an independent advisory committee to the Deputy Commissioner, Policy, Planning and Administration. The chairman of the committee is responsible for preparing the strategic plan, which is designed to provide guidance in the areas of policy formulation, operational planning and administration in the CSC. The first report of the Strategic Planning Committee was prepared in January 1981 and, although not approved at the time of our audit, is regarded by the CSC as a first step in the development of a formal strategic plan.

9.33 A key document in operational planning, the *CSC Direction*, was first published in 1981 and will be revised annually. Results of strategic planning are incorporated in this document, which is a statement of objectives, environmental considerations, management priorities and targets for the next five years. This information is used to develop a detailed five-year operational plan and accommodation plans based on inmate population forecasts for the next ten years.

9.34 Regions use these medium-term plans to prepare annual program work plans for accomplishing the results expected by the Commissioner from each region. The Policy, Planning and Administration Branch at National Headquarters uses the program plans to develop the Main Estimates and reports required by Treasury Board. CSC policy also requires regions and institutions to use program plans to monitor operational performance against stated expectations.

9.35 We found that program work plans were not always based on sufficient quantitative information, such as projected volumes of industrial output and workload standards, to justify resources requested in the budgeting process. For example, although the cost of the Case Management activity was explicitly stated, projections were not made to determine if the performance level expected, according to workload standards, could be attained from resources allocated.

Effectiveness Measurement

9.36 Program evaluation, including effectiveness measurement, is the responsibility of the Evaluation and Special Projects Division, whose Director reports to the Deputy Commissioner, Policy, Planning and Administration Branch. In 1980-81, resources for this Division included \$800,000 for professional services

on a contract basis and \$300,000 for salaries of 14 full-time CSC personnel. The Division plans to assess CSC programs on a cyclical basis to determine whether they are meeting their specific objectives and contributing to overall CSC objectives.

9.37 We found that the structure for managing and organizing the program evaluation function met Treasury Board requirements and followed Office of the Comptroller General guidelines. The roles, responsibilities, authority and accountability of the Deputy Commissioner and the Evaluation and Special Projects Director were documented and communicated clearly, and satisfactory procedures were in place to allow the Senior Management Committee to review and approve evaluations and to follow up on findings and recommendations.

9.38 The CSC has recently prepared a program evaluation plan for conducting evaluation assessments and subsequent evaluation studies. The plan satisfactorily addressed the matters of program component profiles, the rationale for selection or exclusion of activities for evaluation, a five year evaluation schedule and estimated resource requirements. Because implementation of the plan was just beginning as we concluded our audit, it was still too early to determine whether it will be put into effect on schedule and in accordance with the policies established for planning, conducting and reporting the results of evaluation work.

Custody of Inmates

9.39 The custody and control of inmates is the responsibility of the Security function, whose objective is to minimize the risk of harm being inflicted by inmates on the public, CSC staff, other inmates and themselves. Security considerations pervade all aspects of CSC programs. The CSC employs more than 3,000 staff for security and has an annual budget in excess of \$79 million for this purpose.

9.40 Activities to achieve security objectives include operating and maintaining physical security at institutions, gathering and analysing intelligence aimed at preventing escapes and disturbances, maintaining inmate records pursuant to Part IV of the Canadian Human Rights Act and advising on the physical location of inmates for the most efficient use of correctional facilities. Our audit focused on the existence of documented criteria and procedures in place for the management of the security function.

9.41 The 1981 *CSC Direction* stated that management's primary concern with operational security in the present climate of fiscal restraint was to rationalize the costs of custody while improving the effectiveness of security, thereby reducing risks to the public and CSC staff. Emphasis was consequently placed on reducing overtime and improving shift schedules, implementing and refining security post standards, and developing new electronic security techniques and an increased crisis management capability.

9.42 The CSC has carried out a number of studies on the causes of overtime and has formed a National Overtime Committee whose objective is to devise methods by which this cost can be reduced. At the time of our audit, these studies had not resulted in a definitive management approach to the resolution of overtime, and our audit of overtime will continue.

9.43 We found that procedures for operational security were documented and well communicated throughout the CSC by means of the Security Manual. For example, it includes procedures for the escort and transportation of inmates, the use of force, firearms and other restraint equipment, control of dangerous substances, and handling emergency situations.

9.44 We also found that the CSC had several indicators to measure the effectiveness of security and that reports were made regularly to the Senior Management Committee. Examples of these performance indicators include the number of escapes, murders, suicides, injuries to staff and inmates, riots, hostage-takings and use of force by staff.

Case Management

9.45 Case management is the process by which the CSC determines and regularly re-examines an offender's needs and security classification and provides him with counselling and other opportunities, through various social, educational, training and employment programs, to meet identified needs.

9.46 Out of \$83 million and 2,773 person-years budgeted for Offender Programs, the share devoted to the case management activity is approximately \$60 million and 2,200 person-years. The remainder is for the Chaplaincy and Inmate Affairs activities.

9.47 The case management process is highly discretionary; that is, the Service decides what to do with an inmate in its jurisdiction. Because the placement of an inmate in a specified program and institution has cost implications as well as perceived rehabilitation consequences, it is essential that appropriate inmate information be gathered and used for placement decisions.

9.48 Case management is involved throughout the offender's sentence, and major steps include:

- classifying and placing offenders;
- preparing individual program plans;
- monitoring and assessing offenders' progress against individual program plans;

- recommending transfers and early releases; and
- supervising former inmates who have been released on parole, until their sentences expire.

9.49 Once an offender's initial security classification and cell placement have been determined, he is assigned to a case management team consisting of a supervisor, a classification officer, a parole officer, and, as required, psychologists, security officers or medical staff. This team generates and reviews information on the offender and develops an individual program plan for him. The inmate's needs and objectives are considered in planning his rehabilitative activities and his eventual transfer or conditional release. Case management policy requires the team to monitor the offender's participation and progress and inform him of his assessment on a regular basis. Security considerations pervade all aspects of this process.

9.50 Management's expressed objectives in terms of case management are to meet offenders' needs and broaden their contact with society. Contact with society is made through various social activities as well as through day paroles, temporary absences, visits and other programs. The extent to which an offender's needs are met should normally be documented in the inmate files. These files include the individual program plan, progress reports and other information that documents the nature of the crime, the length of sentence, the inmate's behaviour during arrest and incarceration, his education, personal background, interests, rehabilitation needs and like information. The Service uses this information in all decisions on security risk and rehabilitation opportunities.

9.51 Our review of inmate files disclosed weaknesses in management information. In many cases we found the basis for inmate placement to be poorly documented. There were incomplete or unsupported inmate placement reports, needs analyses and individual program plans. Although the CSC has recently introduced changes to the case management process to improve the quality of information in inmate files, we noted that further improvements could still be made in documenting the results of such activities as individual program planning, counselling and performance monitoring.

9.52 As a result of these weaknesses in documentation, case management is unable to determine how many inmates have actually been provided with opportunities to meet their identified needs. This information could serve as a measure of achievement of offenders' individual program plans and hence an indicator of the effectiveness of the case management activity.

9.53 *The CSC should implement appropriate procedures to report on the effectiveness of the case management activity in providing opportunities that meet offenders' identified needs.*

9.54 One of the CSC's governing principles is to "normalize" the offender's environment by minimizing those aspects of imprisonment that can contribute to physical and mental deterioration and by strengthening family and community ties outside the institution. In recognition of this principle, the Service has adopted a policy known as cascading, which means that inmates who qualify for lower security status should be identified and transferred accordingly. It has direct cost and security implications as well as rehabilitation consequences. For example, in 1979-80, the average annual cost of maintaining a male offender each year was \$36,000 in maximum, \$23,000 in medium and \$18,000 in minimum security institutions. Though the CSC is currently developing reclassification criteria and procedures, it has not yet fully documented the cascading process and associated conditions for its application, and therefore does not know whether all the potential economies of the process are being realized.

9.55 *The CSC should fully document the criteria and procedures for progressively reclassifying downward the security status of inmates (the cascading process).*

Education, Training and Employment of Inmates

9.56 The Inmate Employment activity, which in 1980-81 involved 649 person-years and approximately \$45 million, has as its objective the provision of opportunities to meet the needs identified by case management for inmates to gain accredited academic and vocational education and learn job skills by participating in employment programs. The Divisions described below carry out the activities to support this objective. The CSC aims at achieving the full employment of all employable inmates, and gives priority to programs that contribute to the defrayal of incarceration costs.

9.57 Several unique characteristics affect the achievement of education, training and employment objectives. Security, for example, is a primary consideration. The type and level of activities carried out are limited by the overriding need to control the movement of inmates, maintain a safe environment for employees, and to protect inmates from other inmates. There are restrictions on competition with industries in the private sector and also frequent interruptions during the normal working day for counselling, socialization and medical treatment.

9.58 **Industries.** The Industries Division manufactures goods at 24 institutions in 122 different shops. Major products include upholstered and modular office furniture, mail transfer boxes, mail bags, shoes and clothing, which are sold mainly to governmental and non-profit organizations. It employs approximately 1,200 inmates.

9.59 **Automated document processing.** The Automated Document Processing Division operates six shops in five institutions and employs approximately

125 inmates. This group provides services such as data capture, microfilm and preparation of printed matter for distribution to federal government organizations and others. Fees to client organizations are calculated on a cost-recovery basis.

9.60 Agricultural operations. The Agribusiness Division operates 15 greenhouses and 5 farms producing poultry, pork, fish, beef, vegetables and dairy products for the CSC's food services. The CSC estimates that approximately 25 per cent of its food needs are met by agricultural operations, which employ approximately 175 inmates.

9.61 Special employment programs. The Special Employment Programs Division identifies new opportunities for inmate employment, assessing their feasibility and assisting in project implementation. Projects have been conducted in construction, forestry operations, inmate-operated businesses and private sector employment. Control of these projects is usually transferred to the Industries Division once they have been implemented. Opportunities for employment depend on the size and nature of the programs in existence at any given time.

9.62 Education and training. The Education and Training Division provides academic education and vocational training in 22 schools in medium and maximum security institutions. Academic education is provided through services ranging from literacy training to university programs, and vocational training is given in various skills in a number of trades. The number of inmates enrolled in academic and vocational training programs is approximately 1,700.

9.63 The achievement of the objective of providing education, training and employment opportunities for inmates can easily be measured in output terms such as the number of jobs and courses provided in different trades or skills. It is, however, more difficult to measure in terms of whether the opportunities provided meet the needs as defined by case management. Only a joint and co-ordinated approach by the case management and the education, training and employment functions could produce such measurement, and at the time of our audit these two major programs had not fully co-ordinated their activities. More co-ordination was needed in selecting opportunities and establishing their underlying rationale, monitoring an offender's performance, and assessing how successful the education, training or employment program was in meeting the offender's needs.

9.64 *The CSC should co-ordinate the activities of case management and education, training and employment and develop and implement procedures to measure the degree to which opportunities provided meet the offenders' needs.*

9.65 The objective of achievement of full employment is stated as an intended outcome. Performance standards have recently been established against which this objective can be measured.

9.66 The contribution to cost of incarceration is measured by several financial systems. However, because of deficiencies that are now being corrected in the cost accounting systems, the CSC was unable to determine the net contribution of those programs to the operating costs of the Service.

9.67 We found that the CSC did not have adequate cost accounting and unit production data for its manufacturing activities, including analysis of variances between planned and actual results. These limitations made it difficult for management to direct employment activities to reduce costs and maximize profits. Decisions concerning product pricing, use of idle plant capacity and so on were hampered by inadequacies in the current accounting systems. For example, there was:

- no planned or actual unit cost information included in reports to management;
- no provision for including overhead expenditures in product costs, even though the capital cost of equipment used is substantial; and
- no accurate matching of revenues with expenses for the same period.

9.68 Revenues from products produced and sold by the CSC amounted to approximately \$11 million in 1980-81. The contribution from each product group was not measured. Thus management had no formal basis for deciding which products to emphasize to maximize revenue. This failure could have a serious effect on the cost recovery objective of the program. The CSC has recently initiated changes in the cost accounting system which address these deficiencies. However, it is too early to assess their impact.

9.69 There was no formal system to measure and report on the utilization of plant capacity. Statistics on plant utilization would be useful to managers in deciding, among other things:

- where to manufacture a product, if more than one location is available;
- special or bargain pricing at plants having idle capacity;
- plant expansion or shut-down; and
- production scheduling for new orders.

9.70 *The CSC should establish a formal system to measure and report on the utilization of plant capacity.*

9.71 We found that products of agricultural operations, except for beef cattle, were transferred to institutions at prices set in 1950 that were far below current market value and below cost. As a result, costs recorded for the operation of institutions were understated in the Public Accounts. This understatement of the cost of agricultural products distorts the true cost of operating institutions and the measurement of achievement of the cost-recovery objective.

9.72 *The price of products transferred to institutions from Agribusiness operations should reasonably reflect the actual cost of production and/or current market prices, quality and delivery terms considered.*

Accommodation

9.73 Planning, construction, post-occupancy evaluation and maintenance of accommodation for inmates are the responsibilities of the CSC's Technical Services. There are approximately 700 person-years allocated to this activity. Estimated expenditures for the on-going capital construction program, which consists of minor capital projects such as improvements and renovations, were \$59 million for 1980-81. On-going capital projects are identified annually by institutional managers. Technical Services prepares a ten-year accommodation plan for major capital projects, whose projected costs were \$263 million in total for capital and approximately \$238 million annually for operation and maintenance. Accommodation needs are based on population forecasts that are prepared for a period of ten years and include the number of inmates by region and security classification. Current accommodation resources are matched with the requirements identified by the population forecasts, and the difference between available resources and requirements by security classification and region is the projected accommodation need over the next ten years.

9.74 **Planning.** Accommodation planning is comprised of two distinct functions: the identification of needs and the development of an action plan for meeting the needs. We found that the CSC, through the development of an inmate population forecast, is able to define needs very precisely, given the numbers and types of inmates likely to be incarcerated over the next several years. Although significant progress had been made through the development of the ten-year accommodation plan and the statement of institutional performance specifications, further improvements are necessary. For example, we found that the on-going capital projects were not reviewed in conjunction with the ten-year accommodation plan. Such reviews should include a systematic analysis of the life-cycle costs and benefits based on documented construction cost estimates for maintaining existing institutions or constructing new facilities. Several institutions - Dorchester, Laval, Kingston and Stony Mountain - are more than 100 years old and others are more than 50 - the Prison for Women, Collins Bay and Prince Albert. These institutions require substantial upgrading and ongoing maintenance. A feasibility study has been made to determine whether to renovate the Kingston facilities. This study focused on initial capital costs only; it did not include an analysis of operating and maintenance costs over the life cycle of the renovated institution versus those to be incurred in a new institution.

9.75 *The CSC should carry out full studies on the life-cycle costs of existing and planned facilities prior to deciding whether to renovate existing facilities or acquire new institutions.*

9.76 **Cost disclosure.** Our review of recently completed projects at three institutions revealed that the CSC did not obtain program approval from the Treasury Board for the supply and installation of electronic and telecommunication systems. Program approval received for these institutions was for construction costs only and did not include electronic and telecommunications systems worth \$2.6 million paid out of capital funds and not authorized for these projects.

9.77 In addition, the full costs of completing these projects were not disclosed to Treasury Board or to Parliament. For example, certain costs relating to the construction and fit-up of the Kent Maximum Security Institution were not adequately disclosed. These costs were to cover deficiencies, additions and modifications and included such items as furniture and equipment (\$1.7 million), electronic security systems (\$1.0 million) and minor works (\$.3 million). Similar modifications and additions for the Edmonton and Mission facilities were financed through the on-going capital program and not included as part of the total costs for these projects.

9.78 These additions, including design and scope changes to the Kent facility, were made without the prior approval of Treasury Board and increased project costs for the Kent, Edmonton and Mission facilities by \$8 million, \$3 million and \$2 million respectively, or 20 per cent of the total reported costs of the projects.

9.79 *Full costs of capital projects should be disclosed to Treasury Board and to Parliament, and design and scope changes, resulting in higher project costs, should not be made without prior Treasury Board approval.*

Materiel Management

9.80 The Technical Services Branch is responsible for materiel management in the CSC, including purchasing and providing food, clothing, laundry and house-keeping services and acquiring and maintaining highway vehicles and mobile equipment. The Branch is also responsible for developing and maintaining institutional equipment standards and specifications for the quality control of all items purchased. The CSC operates and maintains 3 regional stores, 58 institutional stores and a fleet of 646 vehicles. Approximately \$64 million was spent on materiel in 1980-81 and 566 staff were employed in providing services. Technical Services staff serve more than 12 million meals a year, do the laundry for more than 9,000 inmates and supply uniforms to inmates and more than 7,000 staff. Inventories at 31 March 1980 amounted to \$10.8 million.

9.81 Our audit revealed a number of deficiencies in the management of materiel. These were all related to the lack of a formal materiel management system, including standards and procedures to ensure due regard for economy and efficiency in the procurement, use and disposal of goods and services required to meet the CSC's needs and objectives. The CSC was aware of these deficiencies and plans to introduce a new comprehensive materiel management manual during 1981-82.

9.82 We found needs to be adequately defined and related to objectives for materiel items such as food, machinery, clothing and vehicles. However, the analysis of alternatives to meet the need for services was not always adequate. For example, vehicle requirements were determined by each institution without reference to systematic cost-benefit procedures. Requirements in terms of the quantity and type of vehicles for institutions were not supported and co-ordinated on a service-wide basis, and there were no objective criteria and standards for institutions to follow.

9.83 *The CSC should implement procedures to ensure that materiel needs are satisfied with due regard to economy.*

9.84 We found that the inventory management systems were different among institutions and regions, and there were no national policies and procedures on the procurement, storage, utilization and disposal of materiel. There was also a need for standardized procedures to determine safety stocks, re-order points, re-order quantities, order costs and carrying costs. As a result of the lack of such procedures, there were several instances of overstocking items for which there had been little, if any, demand during the past two years.

9.85 *The CSC should develop and implement an inventory management system and monitor its application throughout the Service.*

Payroll Costs Management

9.86 In 1980-81, estimated payroll expenditures in the CSC were approximately \$247 million or 58 per cent of the total budget. Only about five per cent of the CSC staff are employed at National Headquarters in Ottawa; the rest are in the regions. We examined the management processes used for human resource planning and training and human resource information systems, and compared them with the criteria set out for payroll costs management in our 1979 annual Report. Responsibility for these functions is delegated to the five regional headquarters and, in some regions, to specified positions within institutions.

9.87 **Human resource planning.** We found that the CSC did not have a co-ordinated system to determine the number or types of staff required to accomplish its objectives. The Service has recognized this deficiency, however, and

plans to use the operational planning process that is now being implemented to provide information for human resource planning. Work standards have also been developed in a number of activity areas to convert projected workloads to person-years. For example, an analysis has been conducted of all security posts in institutions, and standards have been developed which will be used to determine human resource needs.

9.88 We also found that the CSC did not have a human resource inventory capable of supplying information about the future availability of existing staff. The Service intends to remedy this deficiency by implementing the Personnel Administration Reporting System described in paragraph 9.97.

9.89 Training. There was no overall training policy or plan and no analysis, on a service-wide basis, of training needs. However, a National Training Council had recently been appointed to develop, implement and monitor training policies, plans and practices. The CSC training program was carried out in five staff training colleges in the five regions; it is now proposed that the majority of recruit training will be conducted at the colleges in Montreal and Kingston.

9.90 Line managers had very little input into the training process. They were not sufficiently involved in analysing needs, developing evaluation criteria for the training carried out, or reviewing and approving training plans for their staff. As a result, there was a good possibility that the training needs of staff may not have been adequately identified, let alone fulfilled. During the design of the new recruit program, however, input was requested from managers and this approach should be continued in the future.

9.91 We also found that there was no central control over training costs, as required by Treasury Board policy, and as a result, the true costs of training were not known. The report submitted to Treasury Board for 1979-80 showed an expenditure of \$5.2 million for training. Our analysis indicated that actual training costs were approximately \$7 million, with nearly another \$4 million to be added for trainees' salaries while on course. We also found that there were a number of inconsistencies in the way training expenses were accrued. Although training budgets were identified, many training costs were assigned to other line objects, such as travel and accommodation.

9.92 The delegation of responsibility for training budgets varied from region to region; in Quebec it was delegated to the institutions, while in Ontario it was the responsibility of regional headquarters. However, neither the regions nor Headquarters monitored training budgets. The CSC did not identify and record the costs of designing and implementing in-house programs. For example, the design of the new 12-week program for recruits was a major undertaking that took 5 years to complete, yet no budget was prepared for this project.

9.93 The CSC did not have a national policy and procedures for evaluating training and determining whether it was having the desired effect of increasing job skills and knowledge. The Prairie Region was the only region that formally reported the results of training, along with an assessment of the trainee.

9.94 Some directors of Staff Training Colleges recognized that they were frequently unable to obtain the best instructors for courses. Nor were there any achievement standards against which to assess the quality of training being given and, therefore, insufficient information to judge whether training programs were effective.

9.95 *The CSC should ensure that line managers have adequate input into the identification of training needs and the development of training courses and plans. The CSC should also develop and implement the necessary procedures to control training costs and evaluate the effectiveness of training programs.*

9.96 **Human resource information systems.** The CSC has recognized the need for a human resource information system and has, as an interim measure, adopted the existing Official Languages Information System (OLIS) by adding on-line terminals at regional and national headquarters. The system does not, however, contain historical information, training and performance appraisal data, data on turnover rates or retirement profiles. Furthermore, OLIS was not accompanied by procedures to ensure confidentiality of information. There was no directive on who had right of access to information from it. Many manual systems were being maintained throughout the Service to supply managers with current information for their day-to-day personnel activities.

9.97 At the time of our audit, the decision had been made to implement a new human resource information system in mid-1981. The Personnel Administration Reporting System (PARS) had been chosen for this purpose. A study was conducted in 1978 which included a functional statement of requirements and outlined the necessity for a complete human resource information system.

Financial Management and Control

9.98 The 1980-81 Estimates showed a budget for financial administration of \$7.8 million and 283 person-years. The Director General of Finance, who reports to the Deputy Commissioner, Policy, Planning and Administration, has overall responsibility for financial administration, although financial responsibility has been decentralized and delegated, in varying degrees, to all CSC facilities. National Headquarters has responsibility for issuing and monitoring policies, procedures and guidelines and, in addition to its own day-to-day accounting operations, has primary responsibility for budgeting, Public Accounts reporting, financial reporting and financial and accounting system development and evaluation. Construction projects costing \$50,000 or more, revenues from industrial sales and recoveries from provinces for provincial inmates in federal institutions are administered centrally.

9.99 Regional headquarters are responsible for financial administration within their territorial jurisdiction. They also provide financial and accounting services for CSC facilities whose size or location does not warrant a complete financial function and control all capital projects under \$50,000 in the region.

9.100 The financial management and control processes in the CSC were basically good. We noted that considerable positive action had been taken in response to recommendations made by this Office, the Office of the Comptroller General and CSC internal audit. Since our Financial Management and Control Study in 1975, the senior financial group has taken on a significantly more important role, and the present Commissioner demonstrates a keen interest in systems and processes for financial control. The financial function is an integral part of the overall management process at all levels, and policies and procedures are systematically reviewed and communicated. As a consequence, the CSC reacts promptly to observations made and issues raised, both externally and internally, and as a matter of course initiates corrective action in the form of identifiable projects.

9.101 Work plans in the area of finance are monitored as financial projects. The Senior Management Committee approves all financial projects and receives progress reports on them. We found that financial projects were meeting identified needs in the area of financial control and were generally being conducted and completed in a reasonable manner and time.

9.102 In 1977, the Treasury Board authorized the transfer of responsibility for control over pay from DSS to departments and agencies. Draft procedures for control over pay input and output had been developed in the CSC, but they had not been published or introduced. As a result, some of the control features required by the Treasury Board were either not in place at all locations or were not operational. Staff in personnel, finance and activity centres had, however, instituted control procedures to offset some of these deficiencies as payroll procedures were being amended to comply with Treasury Board requirements.

9.103 Satisfactory procedures were in operation to comply with the requirements of the budgeting cycle. However, there was no formal variance analysis system in operation at present to explain discrepancies between actual and budgeted results. The CSC was aware of this deficiency, and corrective measures were being taken to relate operational outputs to CSC objectives and priorities and resource inputs. A pilot project had been initiated in the Atlantic Region, and plans called for national implementation in 1982-83.

Internal Audit

9.104 The internal audit function in the CSC is the responsibility of the Inspector General, who is accountable directly to the Commissioner for managing

an independent review program to determine the effectiveness of all CSC operational policies and organizational units, conducting functional and management reviews or audits to ensure compliance with Government and CSC policies, directives and guidelines, investigating irregularities and reporting results to the Commissioner, and for conducting special audits and inquiries as required by the Commissioner. The budget for the internal audit activity was \$1.3 million and 27 person-years in 1980-81.

9.105 An audit plan for the period 1980-85, which has been approved by the Senior Management Committee, calls for a review of all major operations of the CSC at least once within a three-year period, and more often if required.

9.106 We noted significant improvements in the internal audit function since our previous review in 1978 and now conclude that the Service is getting good value from internal audit. Further improvement should be evident when the change to a systems-based approach, where appropriate, is completed, and the audit scope, work and findings are better documented.

9.107 Aggressive follow-up of observations in each internal audit report and the rapidity with which corrective action is taken indicate the importance attached by the Commissioner to internal audit.

Information for Parliament

9.108 We noted that the CSC showed considerable interest and enthusiasm for Estimates reform as one of the first participants in the government-wide Estimates revision project. An illustration of the content and structure of revised departmental Estimates was prepared in co-operation with the Comptroller General's Office and presented to the Public Accounts Committee early in 1981. This expanded departmental presentation, one of four Program Expenditure Plans tabled so far by the President of the Treasury Board, is intended for use by Members of Parliament in the Standing Committees that review the Estimates. It represents a major improvement over the current Main Estimates, and further refinements are expected in time for the 1982-83 Estimates.

9.109 In this regard, action on some of the observations in this chapter would provide additional valuable information for the Estimates. For example, the CSC should include more documentation to support the build-up of work plans and accommodation plans, more information on program effectiveness measures and performance indicators for each activity. As the CSC further develops procedures to measure and report effectiveness, additional information should be disclosed in the Program Expenditure Plan to supplement the recidivism measure now used of "the percentage of inmates released from and re-admitted to federal institutions within five years".

Summary of Recommendations and the Service's Comments

Recommendations

The Service's Comments

Case Management

- 9.53** The CSC should implement appropriate procedures to report on the effectiveness of the case management activity in providing opportunities that meet offenders' identified needs.

The Case Management Policy and Procedures Manual implemented within the past year in all Regions provides for fairly extensive written documentation with respect to an offender's identified needs, program plan and progress. There is also a built-in requirement for the Institutional Employment Board to review each offender's program plan during the drafting process in order to ensure a link between program planning and actual opportunities and placement. Given the fact that this new documentation and process has been implemented recently, it is expected that it will take approximately a full year from date of initial implementation (i.e., 1 January, 1981 in Quebec) before each inmate in the system has been fully documented and placed according to the new format. Changing roles and responsibilities of line staff are also significant and must be carefully monitored during this period to ensure that the intent of policy and procedures is being met.

The offender information system in CSC currently lacks sufficient information pertaining to inmates' identified needs and work and training placements to allow rapid analysis of the effectiveness of CSC in meeting identified inmate needs. Specific data requirements are currently being developed through a joint project between Offender Programs, Inmate Employment and the National Parole Board. The anticipated result of this project is the expansion within the next year of the offender information system to allow for appropriate analysis of program impacts.

Recommendations

The Service's Comments

- 9.55 The CSC should fully document the criteria and procedures for progressively reclassifying downward the security status of inmates (the cascading process).

We agree that the cascading process has not yet been fully implemented and that it is a high priority to realize as quickly as possible the full potential benefits of this approach. It is for this reason that we have recently compressed the time frame for full implementation of the new reclassification criteria and matrix. The new criteria will be applied to all of our current inmates by 15 November, 1981, and from that point on will form a basic component of all transfer decisions. It is felt that although the new criteria will greatly facilitate the identification of inmates for cascading to lower security levels, it will also identify more clearly a number of other problems (e.g., availability of appropriate facilities and program) related to cascading which must be addressed in the longer term.

Education, Training and Employment of Inmates

- 9.64 The CSC should co-ordinate the activities of case management and education, training and employment and develop and implement procedures to measure the degree to which opportunities provided meet the offenders' needs.

The need for better co-ordination of objectives, planning and program management between Offender Programs and Inmate Employment Branches has been recognized as a high priority, and a process to carry this out has been initiated at the headquarters level.

- 9.70 The CSC should establish a formal system to measure and report on the utilization of plant capacity.

The Service agrees that a formal plant capacity utilization reporting system is needed. Several initiatives are currently in progress in Quebec; if successful, they will be expanded through a five-year operational plan to other Regions. In addition, we are:

Recommendations

The Service's Comments

9.72 The price of products transferred to institutions from Agribusiness operations should reasonably reflect the actual cost of production and/or current market prices, quality and delivery terms considered.

- implementing training programs to improve the awareness and motivation of the field staff regarding the availability of and the use of shop scheduling methodology;
- moving more to longer run batch production which increases the shop utilization, makes scheduling easier and enables more accurate determination of capacity and productivity. Target date for implementation is May 1983.

A study is now under way to review present costing, pricing and accounting procedures. Alternatives will be examined and plans developed incorporating Treasury Board policy governing revolving funds. We hope to complete the review by 31 March 1982. We will then be able to implement procedures which will reflect the true value of Agribusiness operations.

Accommodation

9.75 The CSC should carry out full studies on the life-cycle costs of existing and planned facilities prior to deciding whether to renovate existing facilities or acquire new institutions.

The CSC does carry out studies on life cycle costs, and these are taken in relation to our long-range accommodation plans. However, this process will be refined as recommended by the Auditor General.

Recommendations

The Service's Comments

- 9.79** Full costs of capital projects should be disclosed to Treasury Board and to Parliament, and design and scope changes, resulting in higher project costs, should not be made without prior Treasury Board approval.

In 1978, electronic and communication systems and sub-systems were treated as equipment. Thus, at that time their supply and installation were processed through the Department of Supply and Services' normal equipment procurement contracts systems. Procurement approvals requested and obtained from the Treasury Board did include lump sum equipment and furnishings costs. Individual systems were within departmental approval limits; however, procedures have now been introduced and are being followed up to ensure that all costs are disclosed to and approved by Treasury Board prior to the commitment of funds through the Project Brief System.

Materiel Management

- 9.83** The CSC should implement procedures to ensure that materiel needs are satisfied with due regard to economy.

The CSC plans to commence introducing a new comprehensive materiel management during 1981-82.

- 9.85** The CSC should develop and implement an inventory management system and monitor its application throughout the Service.

In order to correct this situation, two studies have been undertaken. One is on the Management Information System, and the other one is a physical distribution study.

The MIS study - a draft has been received and will be presented to the Systems Review Committee in November 1981. Physical Distribution system proposals are being obtained for an implementation plan.

As a result of both studies, the implementation of a new system should be started in 1982.

Recommendations

The Service's Comments

Payroll Costs Management

9.95 The CSC should ensure that line managers have adequate input into the identification of training needs and the development of training courses and plans. The CSC should also develop and implement the necessary procedures to control training costs and evaluate the effectiveness of training programs.

The CSC's line managers, both at Headquarters and at Regions, must sign off all course content delivered in the nation-wide CSC training system. Procedures to control staff training costs and to evaluate the effectiveness of training programs are being developed by the new Staff Training and Development Branch.

DEPARTMENT OF THE SOLICITOR GENERAL
ROYAL CANADIAN MOUNTED POLICE

**DEPARTMENT OF THE SOLICITOR GENERAL
ROYAL CANADIAN MOUNTED POLICE**

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DEPARTMENT OF THE SOLICITOR GENERAL
ROYAL CANADIAN MOUNTED POLICE

The RCMP

Background

10.1 Since its establishment in 1873 as the North-West Mounted Police to provide police services in the Northwest Territories, the Royal Canadian Mounted Police (RCMP) has played an important role in Canadian history. In 1920, the name of the Force was changed to the Royal Canadian Mounted Police, and headquarters was moved from Regina to Ottawa, emphasizing the Force's truly federal role as a national police organization.

10.2 The RCMP enforces federal laws in all provinces and territories. Although the Criminal Code is a federal law, its general enforcement and the administration of justice within the provinces are responsibilities of provincial governments. The RCMP Act (*R.S.C. 1970, c. R-9*), however, allows the Solicitor General to enter into agreements with provinces and municipalities whereby the RCMP acts as the provincial or municipal police force.

10.3 The first provincial agreement was made in 1928 and the first municipal agreement in 1935. At present, the Force has standard agreements for policing all provinces, except Ontario and Quebec, 195 municipalities, and the Yukon and Northwest Territories. Costs are shared for services provided by the RCMP under these agreements; for the year ended 31 March 1981, the federal portion was 44 per cent, except for municipalities with more than 5 RCMP positions, where it was 19 per cent for those positions exceeding 5. The most recent five-year agreements with the provinces and municipalities expired on 31 March 1981 and, at the time of our audit, their renewal was being negotiated.

10.4 In addition to its federal and contractual enforcement responsibilities, the Force provides investigative and protective services to other federal departments and agencies. In the last two decades as a result of Federal-Provincial discussions, greater prominence has been given to the Force's role in providing assistance to other police departments and law enforcement agencies through such services as the Canadian Police Information Centre, Crime Detection Laboratories, Criminal Identification Services and the Canadian Police College.

10.5 At the time of our audit, the RCMP, through its Security Service, acted as the federal agency responsible for the internal security of the country. There was no separate statute governing the existence and operations of this

service. The legal authority was derived from the broad statement of section 18(d) of the RCMP Act and regulation 24(e) which provides for the RCMP "to maintain and operate such security and intelligence services as may be required by the Minister". More recently, a 1975 cabinet directive outlined the function of this service as being to maintain internal security by discerning, monitoring, investigating, deterring, preventing and countering individuals and groups in Canada, who may be engaged in activities such as espionage, sabotage, intelligence gathering, and actual and potential attacks against Canada. After our audit, the Government accepted the recommendation of The Commission of Inquiry Concerning Certain Activities of the Royal Canadian Mounted Police (McDonald Commission) that the Security Service be established as an entity separate from the RCMP.

Objectives

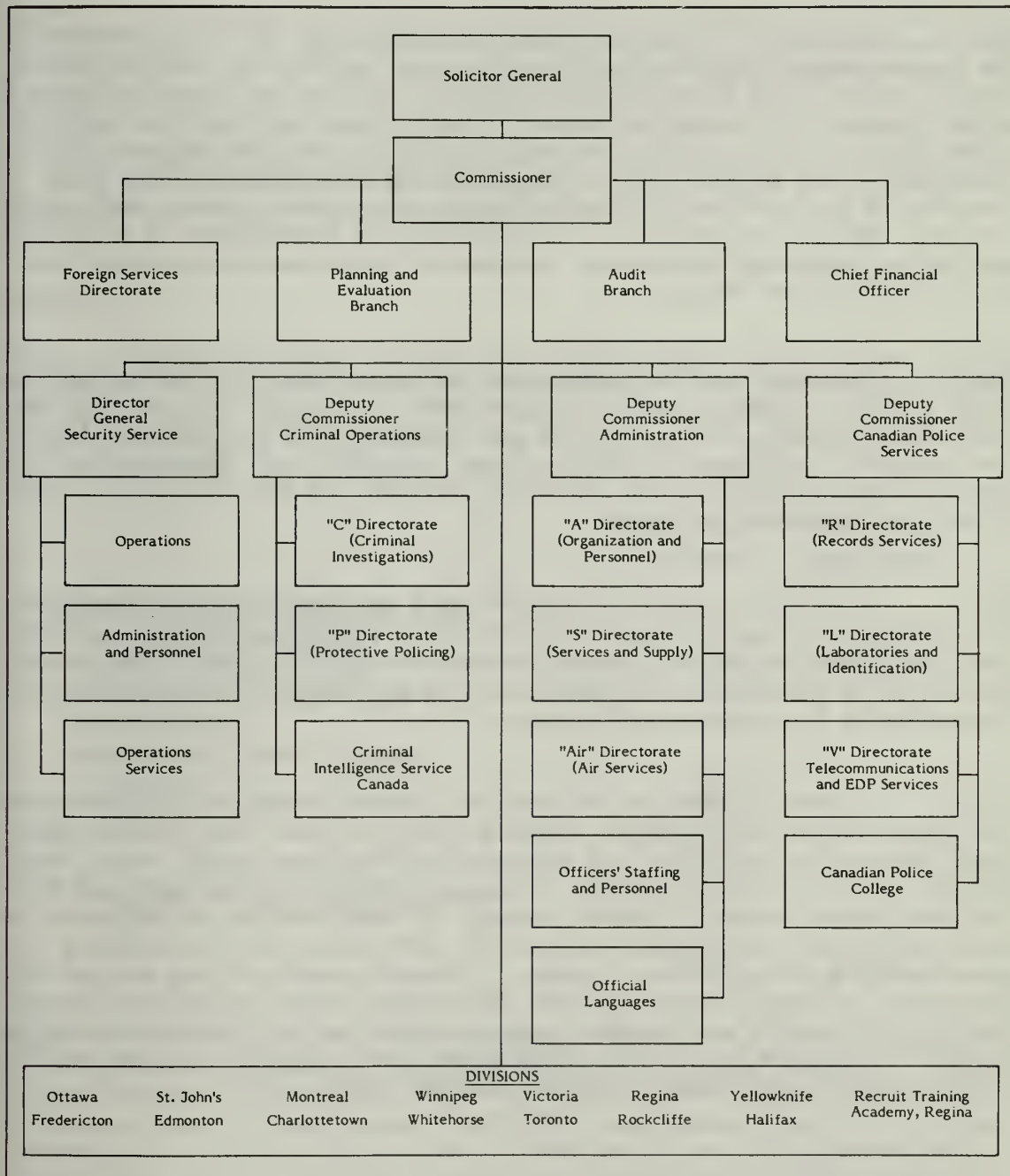
10.6 The objective of the RCMP's Law Enforcement Program, as set out in the 1980-81 Estimates, is "To enforce laws, prevent crime, maintain peace, order and security". The following sub-objectives, also shown in the Estimates, are more closely related to the multiple roles and operations of the Force:

- To prevent and detect offences against federal statutes.
- To prevent and detect crime and maintain law and order in the provinces, territories and municipalities under contract.
- To improve police/community relations.
- To maintain internal security.
- To provide investigative and protective services to other federal departments and agencies.
- To assist, upon request, all Canadian law enforcement agencies by providing specialized police training, and forensic laboratory, identification and information services.

Organization and Operations

10.7 The RCMP is headed by a Commissioner who reports to the Solicitor General of Canada and is responsible for managing the Force. It operates under a decentralized structure as set out in Exhibit 10.1. There are thirteen operational divisions throughout Canada which are divided into 49 sub-divisions and 727 detachments ranging in size from two-person rural posts to large municipal detachments of several hundred police officers. Other divisions are "HQ" in Ottawa; Rockcliffe, which includes the Canadian Police College; the RCMP Recruit Training Academy in Regina; and the Security Service which has its own operations across Canada. Each division, except for the Security Service, is headed by a Commanding Officer (CO) who reports directly to the Commissioner.

THE ROYAL CANADIAN MOUNTED POLICE
SUMMARY ORGANIZATION CHART - 31 MARCH 1981



10.8 Detachments in provinces and municipalities with policing agreements enforce federal, provincial and municipal laws. Where workload justifies, they may be supplemented by special units concerned with areas such as drugs, commercial crime, and customs and excise offences or to provide support services such as identification. Police officers at the small detachments provide a broad range of police services. At the large detachments, the duties of individual officers may be more specialized.

10.9 The Senior Executive Committee (SEC) of the RCMP is composed of the Commissioner, three Deputy Commissioners, the Director General Security Service and the Chief Financial Officer (CFO). SEC's stated responsibilities are to approve the Force budget, all new or revised policies and proposed courses of action arising out of strategic planning or policy and program analyses. SEC is supported by the Directors' Policy Co-ordinating Committee (DPCC) which is composed of directors, who are responsible for enforcement programs and support services. DPCC is responsible for co-ordinating the development of significant policies and programs, information management systems and research and development priorities for SEC approval.

10.10 Functionally, RCMP operations are grouped into the Security Service under a Director General and four other distinct areas of activity: Criminal Operations, Canadian Police Services, and Administration, each under a Deputy Commissioner, and Financial Services under the CFO. At Headquarters, the organizational units responsible for these activities are sub-divided into directorates and independent branches.

10.11 The Security Service operates as a separate Canada-wide division, with units in selected provinces. Details concerning its activities are, for the most part, classified and are provided in camera on an annual basis to the Cabinet Committee on Security and Intelligence and to the House of Commons Standing Committee on Justice and Legal Affairs.

10.12 Criminal Operations includes the Criminal Investigations Directorate ("C" Directorate), with branches, known as policy centres, that develop operational policies for areas such as contract policing, commercial crime, drugs, customs and excise, national crime intelligence, Interpol, immigration and passport, and native policing. Officers in charge of these branches are designated as being functionally responsible for planning, developing and co-ordinating law enforcement activities across Canada. Criminal Operations also includes the Protective Policing Directorate ("P" Directorate) which administers airport policing, VIP security and security systems, as well as the Criminal Intelligence Service Canada, the nation-wide organization that provides facilities for the collection, analysis and dissemination of criminal intelligence.

10.13 Canadian Police Services (shown as National Police Services in the Estimates) provides operational support to the Force and to other Police Departments. This support includes Telecommunications and EDP Services ("V" Directorate), Crime Detection Laboratories and Criminal Identification Services ("L" Directorate), and Records Services ("R" Directorate). The Canadian Police College is also part of these services.

10.14 Administration includes the Directorate of Organization and Personnel ("A" Directorate), the Directorate of Services and Supply ("S" Directorate) and activities such as Air Services, Official Languages, and Staffing and Personnel for Officers. These administrative and support services encompass a wide range of activities from transport management to in-service and recruit training. Other independent branches reporting directly to the Commissioner include the Office of the Chief Financial Officer, the Internal Audit Branch, the Planning and Evaluation Branch and the Foreign Services Directorate.

Resources

10.15 The RCMP had a budget for 1980-81 of over \$800 million, and it expected to collect revenues from policing agreements with provinces, municipalities and others of approximately \$203 million. Personnel costs represent about 70 per cent of total expenditures. The allocation of resources to the Law Enforcement Program in the 1980-81 Estimates was as follows:

	Expenditures (millions)	Authorized Person-years
Enforcement of Federal Statutes and Executive Orders	\$ 217.5	6,373
National Police Services	51.7	1,467
Police Services Under Contract	350.8	9,406
Administration	101.6	2,761
Pensions and Other Employee Benefits	<u>84.3</u>	
	\$ 805.9	
Revenues from Policing Contracts	<u>203.3</u>	<u> </u>
	<u>\$ 602.6</u>	<u>20,007</u>

10.16 At 31 March 1981, there were approximately 19,800 persons employed by the RCMP. Employees of the Force fall into four broad categories: 13,400 Regular Members including just over 500 commissioned officers; 1,400 Special Constables; 1,600 Civilian Members; and 3,400 Public Service Employees. Regular members carry out operational duties in addition to many management, administrative and support functions. Special constables are primarily engaged in contract and protective policing in areas such as the Airport Policing and Indian

Special Constable Programs. Civilian members carry out many specialized technical support functions such as EDP, telecommunications, laboratory and identification services. Public service employees work primarily in administrative and clerical positions.

10.17 The Force is augmented by a number of other groups, including 1,750 volunteers in Auxiliary Police Programs. These volunteers are citizens who donate time to assisting regular members in operational policing and support areas. The RCMP provides them with basic training and issues them uniforms, the cost of which is paid by the provinces. In addition, there are 730 municipal employees, hired and paid by municipalities for administrative support of RCMP detachments on municipal contracts. There are also students filling 70 positions in the supernumerary Special Constable Program. This Program is funded by the Secretariat of the Department of the Solicitor General.

Environment

10.18 Several external factors exert an important influence on the activities of the Force and have implications for the economy, efficiency and effectiveness of RCMP operations.

10.19 Level of crime is influenced by many social and economic factors over which law enforcement agencies have limited or no control. Each segment of the criminal justice system has an interdependent role in combatting and preventing crime. The RCMP, like other enforcement agencies, has to interact constantly and work closely with other organizations such as the Department of Justice, Provincial Attorneys General, the judiciary, and penitentiary and parole services. Changes in the objectives and operational direction of any of these organizations can have consequences and ramifications for the others.

10.20 Law enforcement agencies are also more significantly influenced by legislators at all levels of governments than many other government departments which may have more input to the legislative process. As new legislation is proposed or enacted, such as the recent human rights and access to information Acts, or existing legislation is revised or replaced, these changes can have an impact on the planning and operations of law enforcement agencies.

10.21 Diverse public expectations and changing social standards influence police services. In the last decade, growth in crime has created increasing demands for law enforcement. This, in turn, led to rapid growth in person-years and resources allocated to law enforcement agencies including the RCMP. Concurrently, the public has demanded more accountability and closer scrutiny of police powers. This, together with the diverse mandates and responsibilities of the Force, requires it to carry out many operational tasks, ranging from investigations and apprehension of major criminals to attending to sometimes trivial non-crime related calls for service.

10.22 Relationship with other federal departments. A major influence on the RCMP's federal enforcement responsibilities is a somewhat ambiguous mandate in relation to many of the federal statutes. The RCMP derives its mandate to enforce federal statutes from the general provisions of the RCMP Act which gives the Commissioner the power to confer peace officer status on any individual. However, most federal acts devolve enforcement responsibility on ministers who may either delegate this responsibility to the RCMP or choose to initiate their own enforcement units. In many instances, the enforcement of federal statutes and Acts by the RCMP originated when departments and agencies were small and could not enforce the legislation on their own. In the past two decades, however, many federal departments and agencies have assumed a more active enforcement role with objectives differing from those of the RCMP. For example, whereas the RCMP's investigation of Customs and Excise offences is expected to lead to prosecutions, the Department of Customs and Excise is primarily concerned with collection of revenue. Attempts are being made by the RCMP and the departments and agencies concerned to resolve areas of potential overlap, duplication and redundancy.

10.23 The RCMP Customs and Excise program, for example, involves working with other government departments and agencies in enforcing several federal acts and regulations. The primary program emphasis, however, is on the Customs Act. A 1932 Order in Council under this Act provides the basis for enforcement activities for both the RCMP and Revenue Canada - Customs. It has been subject to different interpretations for many years. Some conflict and overlap between the Department and the RCMP has resulted, particularly since 1976 when the Force shifted its emphasis from personal to commercial smuggling and related offences under the criminal code. Interdepartmental discussions to date have not been successful in resolving the question of respective responsibilities. This lack of clarity has an effect on the Force's ability to plan and manage its enforcement role.

10.24 In addition to its federal enforcement responsibilities which ensure constant interaction with other federal departments, the Force has a close relationship with the Secretariat of the Department of the Solicitor General concerning policy and research. In matters of intelligence and security, it works with the Department of National Defence, the Department of External Affairs and the Privy Council Office. The Force also maintains a liaison presence overseas through External Affairs posts in many countries.

10.25 Relationships with provincial and municipal bodies. The complexity of the RCMP environment is increased by its accountability under policing agreements to the provinces and municipalities for almost half of its policing work. The Force consults with these provincial and local bodies in responding to their specific needs. The priorities and plans of these governments may not always coincide with those of the federal government.

10.26 The Force must also work closely with other provincial and municipal police forces whose actions may have significant impact on RCMP operations. These working relationships are primarily developed at the divisional level and are manifest in joint intelligence gathering and in enforcement programs.

10.27 RCMP and Canadian police services role. The RCMP environment is further complicated by its role in providing assistance and services to all police forces in Canada. This role has evolved over the years primarily because of the national scope of RCMP activities and the federal government's use of the Force as a channel for providing centralized police support services throughout Canada. These duties have been given to the RCMP as a result of various federal-provincial agreements; however, there is no legislated mandate for this role. The Canadian Association of Chiefs of Police, of which the RCMP is a member, works to ensure co-ordination and co-operation among law enforcement agencies and, together with other co-operative efforts, attempts to minimize overlap and duplication of effort among police departments.

10.28 National security responsibility. The responsibility of the Force for the internal security of the country is a major influence on its organization and operations. In recent years, the mandate and conduct of the Security Service has been subjected to commissions of inquiry at both the federal and provincial levels. The Keable Commission in Quebec and, more particularly, the McDonald Commission have required considerable senior management attention and created uncertainty concerning the future responsibilities and organization of the Force.

10.29 Other factors. There are many other factors affecting the Force. For example, recent advances in technology have created significant challenges with potential for increased computer frauds and white collar crimes. At the same time, new opportunities have been created for improving operational efficiency through sophisticated communication and information systems. To keep pace with these changing trends, the Force must constantly adjust its operations, administration, management and training practices.

10.30 In spite of the continued growth in crime, fiscal restraints in government spending at many levels also have serious consequences for the RCMP. In the face of both increasing policing costs and public demand for policing services, the Force is and will be under pressure to maximize the efficiency of its operations and to reassess services that may no longer be justifiable.

10.31 All these operating environment factors and relationships impose special and sometimes conflicting demands on the planning and controlling of operations within the RCMP and ensuring appropriate accountability reporting to various outside bodies.

Audit Scope

10.32 Our comprehensive audit of the Royal Canadian Mounted Police examined the management systems for planning and control. We also examined the processes used to report to managers, central agencies and Parliament on the activities of the Force.

10.33 We concentrated our examination on the following major functions essential for the operation and control of the Force:

- planning;
- measurement of program effectiveness;
- performance measurement and control;
- internal audit;
- electronic data processing;
- financial management and control;
- payroll costs management; and
- information for Parliament.

10.34 In our audit, although we were aware of the close interaction and relationships among the Force, federal departments and agencies, the provinces, municipalities and other police departments, we did not address any issues which would have required an examination of those other jurisdictions.

10.35 Although we did not examine the operations of the Security Service Division because this area was being investigated by the McDonald Commission, we reviewed its financial management and EDP functions.

10.36 We reviewed operations at Headquarters in Ottawa and in 12 other divisions across Canada. We also visited a number of sub-divisions and detachments. Interviews were held with numerous officers and staff of the Force ranging from the Commissioner to constables.

10.37 To supplement our audit projects on planning and performance measurement and to obtain a better understanding of the RCMP management processes and accountability relationships, we reviewed six programs: Traffic; National Crime Intelligence; Commercial Crime; Customs and Excise; Crime Prevention; and Native Policing.

10.38 We wish to express our appreciation for the assistance and co-operation extended to us by RCMP personnel.

Summary of Audit Observations

10.39 Since its inception, the RCMP has grown from a force of several hundred into a national force of over 20,000 with broad responsibilities for federal, provincial and municipal policing, internal security and the provision of police related services to all Canadian police agencies. The RCMP planning and control systems have evolved in response to changes in the nature of crime and technology, changes in its responsibilities, and as a result of increased external pressure for accountability.

10.40 Over the past few years, several matters have consumed much of management's time. For instance, the various inquiries into the conduct of the RCMP, particularly the McDonald Commission, and policing contract negotiations have required senior management's attention and created uncertainty over future responsibilities and organization. In addition, RCMP has encountered difficulties in trying to resolve mandate issues with the respective federal government departments concerning enforcement responsibilities under various federal statutes.

10.41 During the past two decades, the Force has implemented major government-wide initiatives such as program budgeting and Operational Performance Measurement Systems to meet external requirements. Positive developments in the last few years include the establishment of formal procedures for planning, program evaluation and internal audit, and the creation of the Office of the Chief Financial Officer. However, our audit has identified matters needing corrective action, particularly in the planning, program effectiveness evaluation and performance measurement areas. Management had also identified some of these areas for improvement and had initiated a number of projects dealing with them, including the implementation of their IMPAC Action Plan. These projects were not sufficiently advanced for us to assess their effect; however, they should address some of the weaknesses identified in our report.

10.42 **Planning.** The RCMP has been responsive to central agency plans to improve the quality of planning in departments and agencies and has taken steps to implement improvements in its planning approach. Although the Force has initiated a process to review strategic issues, the process needs to be improved to advise senior management on strategic alternatives on a Force-wide and program-wide basis. Furthermore, there were no program operational plans to define total resource requirements and expected results in program output terms. Consequently, the RCMP could not compare actual results to plans.

10.43 As part of our examination, we reviewed planning and control procedures for programs of six Criminal Investigation ("C") Directorate policy centres.

Officers in charge of these policy centres are designated as being responsible for planning, developing and co-ordinating their programs. Policy centres have, however, generally not exercised their functional responsibility for developing program plans, clarifying program objectives in measurable operational terms and monitoring the management and operations of the corresponding sections within the divisions. Similarly, policy centres did not routinely identify and advise divisions on performance measures that could better support operational decisions and help managers to assess individuals and units. This lack of program plans and performance measures inhibits the policy centres' ability to evaluate divisional resource requests.

10.44 Measurement of program effectiveness. The RCMP has followed the guidelines of the Office of the Comptroller General in establishing and managing a program evaluation function. The Force, however, did not provide the evaluation group with the necessary training and essential expertise in the field of program evaluation. The evaluation assessments undertaken to plan evaluations of program effectiveness did not adequately address two important elements -- an assessment of clarity of objectives and the determination of the major potential methodological difficulties. Therefore, there was little assurance that the purposes for conducting the studies could be fulfilled.

10.45 Performance measurement and control. Data to measure police performance usually concentrate on the volume of known crime, the time spent investigating crime and apprehending criminals and the number of crimes solved. The RCMP has a number of systems for collecting data on workload, time and performance for policing activities entailing the investigation of crime and apprehension of criminals. These data are used in various ways to support resource requests and the deployment and use of personnel. However, because of problems associated with collection, accuracy and timeliness of the data and the absence of measures of total workload and performance, little reliance was placed on quantitative data to support management judgement and decisions.

10.46 Although time spent can be recorded for major investigations in areas such as drugs, commercial crime, customs and excise, criminal intelligence and immigration and passport, we found that this was usually not done, nor were data used in controlling actual time against a plan. The RCMP is currently reviewing its existing systems with a view to improving the relevance, completeness, accuracy and timeliness of its performance data.

10.47 Internal audit. Audits play a major role in the RCMP management process and are used as a means of assessing the performance of organizational units and ensuring accountability reporting. We found that considerable progress had been made in implementing the recommendations of our 1978 government-wide study of internal audit and that the Headquarters Audit Branch generally met our criteria for internal audit. Although, we found a need for improving audit work programs and documentation standards and for establishing post-audit quality review procedures, the general quality of management audit reports was good.

10.48 Electronic data processing. Electronic data processing is a vital support service to the RCMP and other Canadian police agencies in meeting their law enforcement objectives. The various organizational units in the RCMP that are responsible for managing EDP resources had developed appropriate planning and control mechanisms. We found, however, that there was a need for senior management to increase its involvement in the overall co-ordination of EDP resources. Improvements were needed in such areas as the establishment of systems development priorities, the monitoring of key EDP - based projects and the performance of EDP resource centres.

10.49 Financial management and control. The RCMP has made progress in improving its financial management and control function. Our 1975 Financial Management and Control Study and the IMPAC Survey by the Office of the Comptroller General, however, identified inadequate activity-based planning and reporting for monitoring and controlling the use of resources. The RCMP initiated a Planning and Accountability Reporting For Outputs and Use of Resources (PAR FOUR) project in 1979 to produce management information intended to link financial and operational plans to results.

10.50 Payroll costs management. Payroll costs account for approximately 70 per cent of the RCMP's budget. Our review focused on human resource planning, training and human resource information systems. The RCMP had not reviewed the practicality and cost-benefit of long-term human resource planning.

10.51 Course development and instructional costs were not estimated and used when assessing alternative approaches to meeting training needs. Cost information was also not accumulated to monitor and control course development and instructional activities.

10.52 Other audit work. Our follow-up on matters raised in prior audits found that the RCMP had addressed the issues reported. RCMP management was also aware of many of the matters raised during our current audit and has already initiated action on a number of recommendations.

Observations and Recommendations

Planning

10.53 The RCMP has been responsive to government initiatives to improve the quality of planning in departments and agencies. In the late 1960s, these initiatives focused on development of a Planning, Programming and Budgeting System. In the early 1970s, the RCMP improved its planning process by establishing a planning branch and providing full-time planning staff for senior divisional management. At the same time, the RCMP developed a program/activity structure and began to establish annual objectives and goals for its activities. More recently, RCMP efforts have been directed toward the IMPAC Action Plan and the Policy and Expenditure Management System.

10.54 In 1979, the RCMP published a Planning Manual that documents the planning process and defines the planning responsibilities of key organizational units. The Planning Manual has, to a large degree, standardized planning procedures across the Force. The RCMP planning process entails several key activities. The annual Policy Planning Conference gives senior management an opportunity to give formal consideration to strategic issues and problems facing the RCMP. The operational planning process focuses on the development of annual Planning Highlight Memoranda specifying divisional resource needs, and annual Goals and Goal Achievement Statements designed to specify what will be done with resources.

10.55 Central planning in the RCMP for the provision of police services is complicated by the policing agreements with the provinces and municipalities and by the decentralized authority structure in the Force. Divisions must be able to plan for and respond to particular provincial and municipal needs.

10.56 **Strategic planning.** After the IMPAC survey, the RCMP began to examine alternative strategies for achieving program objectives and to subject these alternatives to analysis of costs and benefits. The planning process now calls for senior management to review strategic issues, problems and opportunities at the annual Policy Planning Conference. Items reviewed have included growth in organized and white collar crime and demographic changes in population.

10.57 To supplement the annual Policy Planning Conference, which is primarily a forum for discussion, the RCMP needs to improve its process to review strategic issues, analyse the costs and benefits of alternative long-range plans and advise senior management thereon. Present procedures have not adequately supported the development of a long-range plan for the Force that could act as a base for planning both operational and support services. We found that support services, such as accommodation, EDP and telecommunications, had developed long-range plans without the essential focus of an overall long-range plan for the Force or for its major operational programs.

10.58 In general, alternative strategies for programs such as Crime Prevention, Commercial Crime and Customs and Excise had not been identified, documented and analysed for costs and benefits. Such analysis would provide essential input for the development of Force-wide and program-wide long-range plans.

10.59 *The RCMP should review its planning process and identify responsibilities for evaluating strategic issues and analysing costs and benefits of long-range alternatives.*

10.60 Operational planning. Operational planning in the RCMP centres on the Planning Highlight Memoranda (PHM) and Goals and annual Goal Achievement procedures. The purpose of the PHM is to address divisional person-year needs; the goals are intended to focus on what will be achieved with the person-years provided.

10.61 The PHM were mainly concerned with incremental person-year requirements of divisions. Requirements to justify the current level of resources were insufficient. Justification of incremental person-year requests for federal policing positions was largely based on divisional managers' judgement and inconsistent use of quantifiable data, where available, to support police experience. Analyses tended to focus on alternative levels of person-years, not on alternative types of resources or alternative approaches for providing the service. Divisions did not receive adequate guidance from policy centres on federal policing priorities or on the criteria that should be used in developing their person-year requests for federal policing. The Force has experienced difficulties in developing criteria because of inadequacies in the data bases.

10.62 The planning process calls for detachments and divisions to set detailed goals in terms of the results to be achieved with the resources provided for the next fiscal year and for these goals to be monitored for achievement. Some managers have experienced difficulties with the process and have questioned the value of submitting divisional goals to HQ as an accountability tool. Management concluded that, although this exercise did not provide the best means to hold managers accountable for resources, the practice should be continued pending development of an alternative.

10.63 The RCMP planning process does not require operational plans for each program in which total resource requirements and expected results would be defined. For example, for the six programs we reviewed, there was no overall program plan or determination of priorities within the program by the policy centre. Accordingly, there was no reporting on actual results achieved compared to plan.

10.64 *The RCMP should ensure that operational plans for program areas define total resource requirements and expected results in measurable terms to the extent practicable, and policy centres should report on actual results achieved compared to plans.*

10.65 Objectives. HQ Directors are responsible for reviewing and proposing program objectives for approval by their Deputy Commissioners. We found, however, that objectives for a number of program areas such as Native Policing, Criminal Intelligence and Crime Prevention had not been adequately translated into operational terms. This has hindered the development of strategic and operational plans as well as management information needed for these program areas. The lack of clear operational definitions for program objectives has also

hampered the translation of objectives into measurable program goals. In the absence of more precise objectives, there is an insufficient basis for planning, management control and program evaluation.

10.66 For example, the formally stated objective of the Native Policing program is "to provide a highly efficient and effective policing service to Native Peoples". There were, however, no national definitions of a "highly efficient and effective policing service". During our audit, the Native Policing Branch produced a draft statement of objectives for the program that included aims such as better relationships between native peoples and both the RCMP and the rest of the criminal justice system, and encouragement for native peoples to become involved in law enforcement. This draft statement represented a starting point for articulating program objectives for this program.

10.67 The objectives of the crime prevention/police community relations (CP/PCR) program contain undefined terms such as: "equitable balance between prevention and enforcement"; "high standard of police service"; "public confidence and good will"; and "sensitize the public". For example, with respect to the first term, detachments had not been given guidelines to assist in the appropriate allocation of time and resources to prevention and enforcement activities. We noted that little time was reported on CP/PCR activities although this is a Force priority.

10.68 *The RCMP should ensure that objectives for its operational and support programs are defined as precisely as possible to facilitate planning, management control and program evaluation.*

10.69 **Role of "C" Directorate policy centres.** "C" Directorate is primarily responsible for developing policy for law enforcement activities. The Director of Criminal Investigations is supported by branches, known as policy centres, for each of the activities in the Directorate. These include Traffic, Drugs, Commercial Crime, National Crime Intelligence, Customs and Excise, and Native Policing.

10.70 Officers in charge of the branches are designated as being responsible for the planning, development and co-ordination of their activities. However, the role of the policy centres has primarily been limited to one of co-ordination. Some policy centres provide quality assurance for operations, liaise with other departments and agencies, and assist divisions on investigative matters when requested.

10.71 Commanding Officers have line responsibility for the operations of their divisions. Where the volume of work is sufficient to warrant it, separate units have been established in divisions to enforce legislation in areas such as

Commercial Crime, Drugs and Customs and Excise. Otherwise, these activities are performed by detachment personnel as part of their general duties.

10.72 The policy centres have not fully exercised their program leadership role and/or their functional responsibility for monitoring the management and operations of divisional sections. We found that they did not develop specific program/activity plans that could serve as guidelines for the delivery of programs and a basis for accountability. This is especially significant for federal policing activities, where there is greater opportunity for policy development, planning and control. As explained in paragraph 10.96 on performance measurement, there was little evidence of the policy centres having identified, documented or communicated performance measurement procedures to assist divisions in exercising improved control and to support operational decisions. In the absence of formally specified program activity plans, consistent performance indicators and an accountability relationship with the divisional sections, it is difficult for policy centres to evaluate divisional resource requests.

10.73 The program/activity structure cuts across organizational lines. The Headquarters policy centre structure, based on program elements, and a separate divisional structure, with responsibility for planning both federal and contract policing activities, results in fragmentation of program responsibilities among the divisions and "C" Directorate policy centres and affects planning and control. As explained in paragraph 10.125 on financial planning, there were no activity/program budgets to enable responsibility reporting.

10.74 *The RCMP should review the defined role and actual functions of the "C" Directorate policy centres for consistency and ensure that their program responsibilities are clarified.*

Measurement of Program Effectiveness

10.75 The Senior Executive Committee approved the establishment of a program evaluation branch in September 1978, and its activities began in early 1980. During the initial two years, 17 person-years were assigned to the branch; 9 were funded by the Office of the Comptroller General's Implementation Assistance Pool. The branch had completed evaluations of four programs at the time of our audit. Two of these evaluation reports, the studies of the Immigration and Passport and the Customs and Excise Programs, had been presented to SEC. We examined the organizational arrangement and the management of the evaluation function as well as the manner in which these two evaluations were planned, conducted and reported.

10.76 **Organization and management of program evaluations.** The RCMP has followed the guidelines issued by the Office of the Comptroller General in establishing and managing the evaluation function. It has prepared a manual outlining the responsibilities of different parties and the role of the evaluation group.

Comprehensive and annual evaluation plans are prepared for approval by the Commissioner. Evaluation assessments are undertaken to plan evaluation studies and there are formal arrangements for reporting evaluation results to the relevant policy centre and to SEC.

10.77 The Force has taken the position that its initial attempts at program evaluation were to be a learning experience. The RCMP places great importance on policing experience as a background for persons involved in program evaluation. Consistent with this view, the Force used only regular members who had policing experience. These individuals, however, lacked training in the skills essential for program evaluation. This limited the benefits realized from the investment of resources in conducting the evaluation studies.

10.78 *The RCMP should ensure that the program evaluation branch includes a core of skilled evaluators.*

10.79 **Planning program evaluations.** The RCMP has undertaken evaluation assessments to plan its program evaluation studies. Evaluation assessments seek to determine whether program objectives are sufficiently clear to provide the basis for selecting or developing appropriate measurement procedures for use in the actual evaluation study. In the section of our report on planning, we indicate that the objectives for several programs require clarification for planning, control and to facilitate program evaluation. Although the Force had identified the clarification of objectives as a task of the evaluation assessment, this was not addressed during the evaluation assessment. For example, the need to clarify objectives was evident in the Immigration and Passport Program where some of the stated objectives were more concerned with the activities undertaken by the Force than with the outcomes that these activities were expected to achieve. The task of clarifying objectives appeared again in the terms of reference for the actual evaluation studies, reflecting a lack of distinction between the purposes of the evaluation assessment and the formal program evaluation.

10.80 The terms of reference for the evaluations included the task of assessing the extent to which program objectives were being achieved without first determining the difficulties of such studies. There were problems in measuring the effectiveness of the two programs selected for evaluation, particularly in gathering data on the issues addressed by these programs. For example, in the evaluation of the Immigration and Passport Program, the difficulty of obtaining data on illegal immigrants was identified during the actual study. In other words, methodological problems which should have been recognized during the evaluation assessment stage were first identified during the evaluation itself. A properly conducted evaluation assessment would have permitted a re-examination of the purpose of the evaluation -- to measure program effectiveness -- to determine whether such a study should even be conducted. The failure of the evaluation assessment to assess the clarity of program objectives or the methodological issues means that there was little assurance that the purposes of the evaluation could be realized.

10.81 The difficulties referred to above resulted in studies that, in our opinion and that of senior management, resembled nationally focused management audits of programs. This has resulted in senior management questioning the usefulness of program evaluation for decision-making and as a basis for measuring the effectiveness of programs.

10.82 *Program evaluators should fully examine the clarity of program objectives and the methodological issues relevant to measuring program effectiveness during the evaluation assessment stage so that the appropriateness and reasonableness of conducting such evaluations can be determined before studies begin.*

10.83 **Reporting.** Completed evaluation reports are reviewed by the officer in charge of the policy centre for the program under review and by SEC. After discussion by SEC, there is a decision recorded in the minutes with a plan for follow-up action but there is no further circulation of the report. There are parties who might find these reports useful, such as the departments whose legislation is enforced by the RCMP, appropriate divisions and the Secretariat of the Department of the Solicitor General which has responsibilities for research and policy development in the field of policing.

10.84 *The RCMP should develop a policy on distribution and dissemination of program evaluation results to groups outside the Senior Executive Committee.*

Performance Measurement and Control

10.85 We reviewed RCMP procedures to measure performance for federal policing and for provincial and municipal policing under contract. We examined the Force-wide systems that had been established to compile data for performance measurement.

10.86 Data to measure police performance usually have been collected on the volume of crime reported or detected, the number of crimes solved and the amount of time police spend investigating crimes and apprehending criminals. The volume of crime is treated as both a workload determinant and a general measure of police effectiveness in combatting crime. The amount of time spent on an investigation is used to measure efficiency, and the percentage of total crimes solved (clearance rate) is treated as a measure of the quality or effectiveness of investigative effort. We considered the problems in using these traditional measures of performance for investigation of crime and apprehension of criminals that account for about 60 per cent of the time of approximately 12,000 operational policemen who submit time reports. The balance of their time includes general patrol, judicial and detention duties, assistance to the public and other police units, crime prevention and police community relations activities, and administrative and clerical duties.

10.87 Force-wide workload and performance data. In 1974, following a request from the Treasury Board, the Force began to develop an Operational Performance Measurement System (OPMS) for operational policing activities. This system draws information from the Uniform Crime Reporting (UCR) System, the Person-hour Reporting (C75D) System, and the person-year and financial reporting systems. OPMS measures relative operational efficiency by comparing the time spent on an investigation to the 1974-75 base-year time. Operational effectiveness is measured by the clearance rate. Performance data based on the OPMS were first reported to Treasury Board in the 1977-78 Program Forecast. The RCMP uses the case burden method to justify resource requests for provincial and municipal policing activities. The number of persons required is based on forecasts of the number of criminal code crimes and the number of criminal code cases handled historically by each officer.

10.88 In addition to the Force-wide systems, some information systems have been developed at the divisional and program level to collect workload and performance data useful in these areas. For example, the Commercial Crime and Customs and Excise Branches maintain data on the number of commercial crime files opened by broad classification, the frequency of seizures and the dollar value of customs seizures.

10.89 In the absence of comprehensive, quantifiable measures of workload and performance, the RCMP relies on the uniform training and development of police officers, close supervision of work, and frequent reviews, inspections and audits of operations to ensure an acceptable level of efficiency and quality in the delivery of police services. We found that the RCMP's development and use of performance measures was generally consistent with other police forces.

10.90 Developmental projects. There are a number of Force-wide projects under way that have not yet reached the implementation stage:

- In 1976, the RCMP began to develop a revised operational reporting system for crime files and an Operational Statistics Reporting (OSR) System to identify each individual investigational file with its originating organizational unit. OSR is intended to facilitate measurement of workload and to provide workload data for non-investigational activities such as assistance to the public or other police forces.
- A project called Planning and Accountability Reporting For Outputs and Use of Resources (PAR FOUR), to integrate operational and financial planning, was initiated in 1979 in response to the IMPAC study. PAR FOUR is currently in the systems analysis phase and includes a sub-project to improve person-hour data by making them more fully compatible with OSR data.

- "C" Directorate has initiated a project to develop a police resourcing formula for provincial and municipal policing activities using cases weighted by their work content that may replace the case burden approach.

10.91 At the time of our audit, none of these force-wide projects had advanced to the stage where we were able to assess their potential to improve existing data bases or performance measures.

10.92 Force-wide data bases. The Operational Performance Measurement System has been the major Force-wide system for measuring operational efficiency. Our comments are related to OPMS as well as to the two major data bases, UCR and C75D, from which OPMS draws workload, time and clearance rate data. The RCMP has not analysed changes in operational efficiency measured by OPMS or validated continued use of the 1974-75 base-year. OPMS data has generally not been accepted by managers and consequently has not been extensively used by them for management purposes. Its main use has been for submissions of performance data to the Treasury Board.

10.93 Collection of Uniform Crime Report (UCR) data is a statutory requirement of Statistics Canada. The UCR System collects data on the number of crimes reported or detected and cleared by type; the number of traffic infractions and accidents; the number of persons killed or injured in traffic accidents; and the number of persons charged. UCR data must be reported by geographical area (detachment or police force). The data cannot be used to measure investigational workload or clearance rates for special enforcement units (commercial crime, drugs, general investigations, etc. that cut across detachment geographical boundaries), or for detachments because of the contributions of special enforcement units, other detachments and other police forces. In addition, the System does not collect workload data on the broad range of police activities which are not crime-related, such as assistance to the public. For these reasons, UCR data is of limited use for measuring workload and operational performance particularly at the unit level.

10.94 The person-hour reporting system (C75D) collects data on the time spent by operational police on a wide-range of investigational and non-investigational activities. Summaries of C75D data were not received or reviewed by most policy centres. Such summaries could be useful if policy centres were more involved in planning and monitoring federal policing operations. The potential usefulness of C75D reports was further limited as a result of confusion in recording time and late and incomplete reporting. C75D input documents were generally not required for managers or policy centre personnel and there was no formal documented review and approval mechanism for C75D input documents. In Commercial Crime, for example, when an investigation is being conducted under the Criminal Code for a case originally reported as a bankruptcy, the time could be recorded as either bankruptcy, frauds and theft, or other criminal code. This affects the ability to relate time spent to crimes investigated. Divisions and policy centres need accurate and timely data that measures their workload and time to enable them to monitor efficiency and forecast resource requirements.

10.95 *The RCMP should ensure that the current projects to replace or supplement the OPMS, UCR and C75D systems take into account the needs of divisions and program managers for workload and performance data and include appropriate controls to ensure completeness, accuracy and timeliness of data produced.*

10.96 **Performance measurement in programs and divisions.** A number of divisional managers in the various program areas such as Customs and Excise, Traffic Policing, and Criminal Intelligence Services have attempted to define workload and performance criteria for their activities. For example, indicators in the Traffic program, such as the enforcement index (number of hazardous moving violations/number of cumulative fatal and personal injury accidents), the contact rate (number of traffic offences ticketed per man per shift), and the radar enforcement percentage, are used in several divisions to monitor efficiency of traffic enforcement units and assist in determining personnel requirements. These indicators provide a norm by which traffic personnel are made aware of minimum requirements, facilitate comparison of the performance of various traffic units in a division, and identify when performance varies from standards. Headquarters' policy centres have generally not been aware of these indicators nor have their potential for Force-wide application been considered.

10.97 *The RCMP should ensure, through its "C" Directorate policy centres, that workload and performance measures developed by divisions are assessed for their potential Force-wide application.*

10.98 **Managing investigations.** Several areas such as Commercial Crime, Customs and Excise, Criminal Intelligence Services, and Drugs are involved with long, complex investigations that consume considerable time and money. Although time and costs can be recorded for major investigations and used in controlling actual time against a plan, this was not usually done. For example, our reviews of Commercial Crime, Customs and Excise, and Criminal Intelligence Services operations indicated that, in the absence of formal performance measurement systems to monitor and evaluate investigations in the divisions, performance evaluation for sections and individuals was largely subjective. Although each individual investigation is different, there was agreement among a number of individuals interviewed that tentative investigation objectives and time and cost estimates could be documented. For example, directions given and time and money spent could be recorded as investigations progress. Actual time and money required could then be compared to estimates, and assessments could be made of the degree to which investigation objectives were achieved. Such records could provide a basis of monitoring current performance and establish an improved data base for planning.

10.99 *The RCMP should establish tentative investigation objectives and time and cost estimates for long, complex investigations. Actual time taken and money spent should be compared against forecast and used to monitor performance, establish a better data base and supplement subjective judgement.*

Internal Audit

10.100 Audits play a major role in the RCMP management process. They are viewed as a means of assessing performance of divisions, directorates and independent branches and of reporting on accountability.

10.101 The Headquarters Audit Branch, which in 1980-81 had a staff of 35 and a budget of about \$1.5 million, is headed by an Assistant Commissioner who reports directly to the Commissioner. Audit Branch submits its management audit reports to the Commissioner and an audit committee composed of senior management and chaired by the senior deputy commissioner. The Branch is composed of a Publication and Co-ordination Section and 4 audit groups: Management Audit Section with 18 persons; Financial Audit Section with 5 persons; Public Service Audit Section with 2 persons; and Operational Audit Section with 4 persons dedicated to reviews of Security Service operations.

10.102 Reliance on audits has evolved partially from historical developments and, in some areas, because other kinds of management information either did not exist, or because management had little confidence in what was available. There are many activities and control functions identified as "audits" within the Force. This results in a lack of distinction among the concepts of "audit", "management review" and "quality review" as they are defined by the Office of the Comptroller General. A 1979-80 RCMP study identified the need to clarify these concepts. This study led to policy changes that were approved in principle by the Senior Executive Committee in April 1980, but were still being formulated at the time of our audit. SEC also concluded that there should be only two levels of internal audit in the Force, the Headquarters Audit Branch and division audit units. RCMP personnel were generally not aware of the differences between audits, management and quality reviews and had a general perception that there were too many "audits".

10.103 Our 1978 government-wide study of internal audit included the RCMP's Financial Audit Section. As part of our current comprehensive audit, we followed up on our 1978 comments and reviewed the Management Audit Section and the functions of divisional audit units. We found that considerable progress had been made by the Audit Branch and that, in general, its operations met the criteria for internal audit. The Branch has also been responsive in addressing matters which were identified and discussed during our audit. We believe, however, that there is a need for further improvements in the following areas.

10.104 **Performance of audit work.** Improvements have been made to the audit process over the past two years, including the publication of an audit manual and, in December 1980, standards of performance for the Audit Branch. By 1982, the RCMP intends to combine the various sections of the Audit Branch into an integrated audit unit to perform comprehensive internal audits.

10.105 Audit documentation should include a clear audit program, evidence of work done and a review to ensure quality. Audit plans briefly summarized major areas to be reviewed; however, there were no formal audit programs that specified audit criteria, established audit objectives and appropriately documented the audit emphasis. Audit programs should link procedures and objectives and facilitate control of work. Standards for working paper documentation and indexing were insufficient to guide audit personnel in the performance of their work. Further, there was no formal working paper review or quality assurance procedure; undue reliance was placed on the debriefing process. Lack of clear and sufficient documentation make it difficult for others to rely fully on the audit work performed. The Audit Branch has started reviewing possible alternative methods for indexing and documenting audit work. Notwithstanding the documentation weaknesses, we found that the general quality of management audit reports was good.

10.106 Audit personnel at all levels are usually assigned to the Audit Branch for three years. In 1980, an audit seminar was held to orient new members. Selective use was made of outside audit courses; however, no specific training on detailed audit disciplines was given to new Audit Branch members to complement their on-the-job training. This resulted in some auditors feeling ill-prepared to carry out their assigned responsibilities properly. Arrangements are currently being made to send all new Audit Branch members and some divisional auditors to an internal audit course in 1981.

10.107 *The Headquarters Audit Branch should clarify documentation standards for audit programs and working papers and should introduce related training and a quality review process to assure adherence to such standards.*

10.108 **Divisional audit units.** Divisional audit units perform audits on behalf of divisional commanding officers and are in the developmental stage. There are currently six divisional audit units and the Commissioner has approved the establishment of six more one-person divisional audit units. Audit Branch has no functional responsibility for the divisional audit units. We found that there was little consistency in their objectives, scope, approach and coverage.

10.109 The RCMP has recognized the need to establish for divisional audit units:

- audit standards and appropriate methodology;
- a program to acquaint commanding officers with the strategy and methodology to carry out comprehensive audits; and
- a training program to develop the competence of divisional auditors.

10.110 By April 1981, only the initial steps had been taken to meet these needs. The achievement of the goals for divisional audit units and the establishment of appropriate standards, including detailed attention to performance standards, are essential to enable others to rely on work done by divisional audit units. An alternative to assist developments may be to establish a functional relationship between Audit Branch and divisional audit units.

10.111 *The RCMP should ensure that its program for developing audit standards and methodology for divisional audit units is implemented as quickly as is practicable.*

Electronic Data Processing.

10.112 The RCMP had expenditures of approximately \$29.5 million in 1980-81 for electronic data processing (EDP) and EDP-related resources. "V" Directorate is the policy centre for EDP and incurred 87 per cent of EDP expenditures. The remainder was incurred by the operating divisions and other directorates, with Automated Information Services (AIS) of Security Services the largest at 8 per cent. The security and inspection function carried out by the Force on behalf of the Treasury Board is the responsibility of "P" Directorate. This function was not reviewed as part of our audit.

10.113 "V" Directorate is responsible for developing and operating the Canadian Police Information Centre (CPIC), a major EDP-based crime information facility that supports police forces across Canada. CPIC accounts for approximately 70 per cent of the EDP resources controlled by "V" Directorate. The Directorate's remaining EDP resources are used in support of RCMP internal requirements.

10.114 The entities responsible for EDP resources within the Force have developed appropriate internal mechanisms to manage their operations. With specific reference to "V" Directorate and AIS, we noted that:

- major hardware and software changes were individually planned and monitored;
- performance of the hardware/system software configuration was regularly evaluated;
- individual projects under development were monitored within the EDP service areas; and
- both entities recognized the need for and were developing long-range plans.

10.115 We did, however, identify certain weaknesses in the overall management of EDP resources on a Force-wide basis.

10.116 The EDP policy, approved by SEC and published in October 1980, did not clearly identify the mandate of "V" Directorate with respect to Security Services, "P" Directorate and other EDP resource centres, nor did it outline the responsibilities of senior Force management with respect to EDP. As a result, the mandate of "V" Directorate with respect to EDP in the Force, as outlined in the policy, was not clearly understood or accepted by all units with EDP resources. This situation has an impact on the effective co-ordination of EDP resources in the Force.

10.117 There was no approved long-range plan for the Force on which "V" Directorate could base its strategic planning for EDP. The long-range planning carried out by "V" Directorate is based primarily on technical trends and not on RCMP program requirements. Priorities for allocating EDP resources were not explicitly discussed or set by senior management. Within "V" Directorate, which services the largest user group, allocation of resources was based on the Directorate's perception of Force priorities.

10.118 Key RCMP projects, such as the Police Information Retrieval System, the new Financial Management System and PAR FOUR, have missed development milestone targets. One factor in project slippage was the considerable difficulty in staffing civilian technical professional positions. There was no management vehicle for dealing promptly with these issues and, as a result, the senior executive group was not formally advised of EDP project slippage.

10.119 Performance indicators for EDP centres in the Force had not been defined and/or reported to the senior executive group. Senior management was therefore unaware of changes in performance and unable to ensure that corrective action was taken when required. Performance indicators could include production service levels, user satisfaction, project status, budget compared to actual expenses, quality control results, capacity utilization and so on.

10.120 Although senior management reviews the Annual EDP Report and Plan, the annual budget and initial plans for certain major projects, it had not been sufficiently involved in other areas, as noted above. We believe that an EDP Steering Committee made up of senior representatives of the divisions and directorates would provide an appropriate vehicle for dealing with EDP resource management.

10.121 *An EDP Steering Committee should be established with responsibility for EDP matters, such as policy, systems development priorities, key project monitoring, performance monitoring and related concerns such as staffing.*

Financial Management and Control

10.122 The Office of Chief Financial Officer was established in May 1979. The Chief Financial Officer (CFO) reports directly to the Commissioner and is a member of SEC. He is responsible for financial planning, budgeting, accounting and reporting and is assisted at Headquarters in Ottawa by the Budgeting and Systems Directorate and the Financial Control and Authorities Directorate. Divisional financial officers are responsible to their Commanding Officers for controlling, recording and reporting the use of financial resources in the divisions. These financial services and supply officers receive functional direction from both the CFO and the Director of Services and Supply in Ottawa.

10.123 Our 1975 Financial Management and Control Study (FMCS) showed that the RCMP financial management systems and controls had resulted in a continuous updating of financial systems and procedures to meet changing requirements. FMCS also identified areas for improvements in the various components of the financial management system. We reviewed these as part of this audit.

10.124 The Force has made progress in improving its financial management and controls and has implemented the majority of FMCS recommendations. Our current review also indicated that management was working closely with central agencies in instituting appropriate improvements. Areas identified by FMCS and requiring further attention are financial planning and budgeting and financial reporting.

10.125 Financial planning and budgeting. In FMCS we observed that the budgetary process emphasized total dollar controls but did not include activity based reports to monitor and control the use of resources. In 1978, we presented illustrative estimates to the RCMP to demonstrate how activity budgets could be prepared and presented. In 1979, the RCMP included the PAR FOUR project in its IMPAC Action Plan to produce a management information system that would link budgets to results and measure achievements related to resources used. Although there were sufficient reviews, documentation and controls to ensure that the quality of information in the budgeting process was adequate, operational planning was not integrated with financial planning because there were no complete activity/program budgets that would enable comparison of planned and actual costs and performance. Consequently, it is difficult to hold managers accountable for their performance through the budgetary process. Current plans call for the PAR FOUR study to evaluate the suitability of the program activity structure and its relevance and compatibility with attempts to improve managerial accountability and control.

10.126 Accounting systems and controls. Accounting systems and controls were generally adequate and met the criteria set by our Office. Nevertheless, our audit identified areas of financial operations where opportunities existed for increasing efficiencies, such as replacing extensive and costly divisional financial

audits of detachments by a simplified financial reporting system. The Force was aware of the issues and was taking steps toward resolving them.

10.127 Financial reporting. There are numerous financial reports produced under the direction of the Office of the CFO and distributed to the divisions and other users of financial information. However, many of these reports, such as annual activity cost and monthly expenditure trend reports, were not used by divisional financial officers. Two reasons given were the lack of meaningful presentation of information and the late delivery of these reports. The Force had not reviewed the extent to which the present financial reporting system met the current needs of staff at Headquarters and in the divisions.

10.128 *The RCMP should ensure that its financial reporting system meets the needs of staff at the Headquarters and divisional levels.*

Payroll Costs Management

10.129 In our audit of payroll costs management, we examined human resource planning, training, and human resource information systems.

10.130 Human resource planning. The Force generally met our criteria for human resource planning. It has developed and implemented mechanisms to plan manpower requirements in the short to medium-term (one to three years). The RCMP forecasts human resource needs over a three-year period, inputs the forecast to the Force planning cycle, closely monitors attrition rates, plans recruiting and basic training around approved new person-years and the anticipated attrition rates, and uses succession planning to identify the most suitable person to fill individual openings.

10.131 The Force's Administration Manual requires detailed projections of human resource needs for a three to five-year period. This requirement was not met. There were varying opinions among personnel managers of the Force with respect to the need for and practicality of long-term (three to five-year) human resource planning in a police environment. No study had been made on the feasibility of long-term human resource planning in the RCMP.

10.132 Regular members of the Force fill a variety of operational police and administrative roles from general duty policing to specialized roles in customs and excise enforcement, commercial crime enforcement, finance, audit, program evaluation, and so on. We found there was no formal career path identified in these various programs or functional areas. As well, there was no system that would connect career paths between these various areas, allowing for an orderly progression for individual members. Although the succession planning process endeavours to identify successors for positions prior to the position becoming vacant, it is a short-range, one to two-year program and does not establish

longer-term career plans for subsequent career progression of members. Lack of advancement opportunities in certain fields has caused members to seek transfers to new work areas. The movement of personnel from one career stream to another may broaden their overall experience base, but it has also resulted in a loss of expertise from work areas that require an increasing amount of specialized knowledge, training, education and background experience. Although a major study on Occupational Task Analysis was carried out in 1977, no policy decision had been made to pursue the concepts of alternative career paths and specialization.

10.133 *The RCMP should determine the most appropriate forecast period for human resource planning, and further review the concepts of career planning and specialization to optimize the development and use of human resources.*

10.134 **Training.** The Training and Development Branch of the RCMP is responsible for the development, implementation and administration of the Force's training and development policies and program. The RCMP estimates that over \$26 million was invested in training and development activities in 1980-81.

10.135 Training is an essential element in the operation of the Force. Regular members are recruited at the same basic level and are provided with operational, administrative and managerial training through the Training and Development Branch. All courses are developed under Training and Development Branch standards or are selected from sources outside the Force based on an appropriate evaluation of alternatives. In addition, selected regular members are sent to universities for degrees or for one year non-degree courses.

10.136 As part of our 1978 Study of Procedures in Cost Effectiveness (SPICE), a report on certain aspects of training and development activities was provided to the Force. Action has been taken on most of the recommendations. Our current review identified areas that warrant further management attention.

10.137 We found that when a training need was identified, a study was undertaken to identify a number of alternatives for meeting the need. Estimates of the development and instruction costs of each alternative were not made. This resulted in incomplete information for the assessment of alternatives and no basis for monitoring actual development and instruction costs.

10.138 The actual cost of the Force training program was not available in either an aggregated form for senior management review or in detailed form for monitoring and controlling specific course development and instruction costs. The proposed Force-wide time reporting system could provide some information, but the Training and Development Branch had not determined how it might be used. The Branch has, however, made a commitment to provide aggregated training costs in their annual report on training.

10.139 *The RCMP should ensure that studies of alternatives to meet training needs include estimates of development and instruction costs.*

10.140 *The Training and Development Branch should accumulate and report costs for course development and instruction.*

10.141 **Human resource information system.** PARADE is the Force-wide human resource information system that supplies data on Regular and Civilian Members and Special Constables. The system carries tombstone data, historical information on postings, performance evaluation data and individual preferences for future postings. PARADE is used as a primary input to the succession planning process. It has been well received by those personnel units having access to it and no complaints were received with respect to the adequacy, accuracy and timeliness of the data.

10.142 There is only minimal information on the 3,400 Public Service Employees of the Force on the PARADE system. Some of the required Public Service Personnel Branch human resource information may be obtained from a variety of other automated personnel-related systems, but the Branch often must accumulate data manually to meet information needs. This process is frequently time-consuming. The Public Service Personnel Branch has identified information on training as a priority and plans to undertake a study in 1981 to identify priorities for information as a basis for submission to senior management.

10.143 *In identifying its information requirements, the Public Service Personnel Branch should determine the feasibility of integrating the required personnel data into an automated human resource information system.*

Information for Parliament

10.144 The improvements recommended in this chapter, particularly in planning, performance measurement and program effectiveness, would produce information which, if provided to parliamentarians, could help them to relate resources requested to planned results and to compare actual results with plans. Although the following observations do not represent a complete description of matters that should be considered, they indicate the type of information that the RCMP should be examining for disclosure in the Estimates and Public Accounts. Management should also determine whether the appropriate information can be produced, so that it is available for the Estimates and Public Accounts revisions that are being carried out by the Office of the Comptroller General.

10.145 **Environmental information.** To help establish the setting for police work, the actual and expected trends in broad categories of offences, such as white collar and computer crime, could be shown and their effects on the Force explained in general terms. The extent to which RCMP workload depends on

different factors including crimes, other demands for police services, demographic statistics and unemployment levels, could also be described.

10.146 Performance and workload information. The overall effectiveness and efficiency of law enforcement and other factors affecting police work are not easily explained or measured. Other important factors, however, can be explained and should be included in the Program Expenditure Plans supporting the RCMP's Estimates provided they are carefully selected and qualified so as not to mislead the reader. Information about specific types of police work such as "drug enforcement" and "traffic" should be disclosed. The expenditures and person-years spent on drug enforcement, for example, might be related to trends in drug-related deaths, the expected number of major and other drug investigations, the expected cost and time per case, trends in the value of drugs seized, the street price of drugs and the number of known users. A selection could be made from these and other factors to help explain drug enforcement work and support the estimated level of expenditure. Similarly, an attempt should be made to select and explain workload and performance information in the sections of the Estimates dealing with each of the other major categories of police work.

10.147 Cost-sharing agreements. To provide an understanding of the activity called "Police Services Under Contract", the Estimates should briefly describe policing agreements with the provinces, municipalities and territories. Such information could include:

- terms and renewal dates, including the portion of costs borne by the federal government;
- revenue and explanations of changes in the rates and fees charged;
- some explanation of the allocation of staff and resources to specific types of work such as preventive policing, investigation, general duty, traffic or administration.

10.148 Inter-relationships. A brief explanation could be given of joint operations with other enforcement agencies, and the use made by the RCMP of voluntary public and other assistance.

10.149 Jurisdiction over federal law enforcement. The RCMP has a major role in enforcing over 60 federal statutes; however, many other federal departments and agencies also have enforcement capabilities. The introductory section of the RCMP Estimates could refer to the whole field of federal law enforcement and the way funds and responsibilities have been allocated. A list of these Acts might be included in the RCMP Estimates as well as an indication of the expenditures incurred enforcing the major ones.

10.150 Personnel. RCMP salaries, wages and other personnel costs account for approximately 70 per cent of gross program expenditures and over 5 per cent of total government personnel expenditures. The current Estimates show the numbers and ranks or levels of both public servants and members of the Force. Additional summary information might be provided about the Force; for example, members performing particular types of contract and non-contract work, average salaries, training costs, attrition, transfers, retirements and the number of staff in each division.

10.151 Pensions and other employee benefits. A statutory appropriation of \$87.9 million for pensions and other employee benefits for members of the Force is included in the \$96.9 million in the 1981-82 Estimates for pensions and other employee benefits. These amounts should be explained, particularly the government's contribution to the RCMP Superannuation Account.

Other Audit Work

Review of IMPAC Action Plan

10.152 In 1978, the Office of the Comptroller General launched an initiative, commonly known as IMPAC, to improve management practices in government departments and agencies. The Public Accounts Committee has indicated that our Office should monitor this significant government initiative and report to the House of Commons on its progress. During our comprehensive audit, we continued the monitoring process that we began at the RCMP in 1980. We have considered the Force's IMPAC Action Plan when reporting the findings and recommendations arising from our current review.

10.153 The original RCMP Action Plan was approved by the Office of the Comptroller General in December 1979. The estimated implementation cost for the Plan was \$1.7 million, and the target completion date was 31 December 1982. The Plan consisted of six projects: strategic objectives and plans, long-term operational planning, current year operational planning, operational budgets (commonly called PAR FOUR), program evaluation, and internal audit plans and results.

10.154 At 31 May 1981, the date at which we assessed the progress of the Action Plan, the Internal Audit project had been completed by the Force and signed off by the Office of the Comptroller General. Work on all other projects had been initiated; however, the Force was revising its Action Plan to incorporate refinements and changes to the original projects. Implementation of the revised Action Plan, including PAR FOUR, the largest project, is scheduled for completion by 1 April 1984.

Follow-up on Government-wide Materiel Management and Energy Conservation Audits

10.155 In 1980, we reported on the RCMP management of vehicles (Paragraphs 2.129 - 2.136) and uniforms (Paragraphs 2.192 - 2.194) as part of our government-wide audits of materiel management and energy conservation in government. As part of this audit, we followed up on those matters and found that appropriate action had been initiated in response to our findings.

10.156 Vehicles. The RCMP maintains a fleet of cars reserved for emergency use. The Force is conducting a study to determine the appropriate stock level for such reserve vehicles. In addition, the Force is drafting policy to promote both pooling of vehicles for more efficient use and consideration of vehicle condition and future repair and maintenance costs before disposal.

10.157 Uniforms. We reported that the RCMP managed the supply of uniforms to about 12,000 uniformed members with due regard for economy and efficiency. Members receive an allowance to purchase some items of uniform. The Force has begun to document its policy and procedures for calculating this allowance. It is also studying the alternatives to current inventory locations and distribution methods to determine the potential for cost reductions.

10.158 RCMP Internal Energy Conservation Program. As a follow-up to our work in the RCMP during the government-wide study on energy conservation in 1980, we reviewed progress with the Force's Internal Energy Conservation Program. Our follow-up revealed that a five-year department-wide program has been developed and is being implemented beginning in 1981-82. The program consists of a series of detailed strategies and measures designed to reduce energy consumption.

10.159 Although it is too early to assess the impact of these measures, they include a number of improvements to management controls within the Program. These improvements include obtaining approval for the establishment of an internal energy conservation organization; developing department-wide plans with measurable goals; carrying out energy surveys; using consultants and existing government expertise; and identifying impediments and achievements in an annual report of results.

Summary of Recommendations and RCMP's Comments

Recommendations

RCMP's Comments

Planning

- | | | |
|--------------|---|---|
| 10.59 | The RCMP should review its planning process and identify responsibilities for evaluating strategic issues and analysing costs and benefits of long-range alternatives. | Agreed. The review of the planning process is an integral part of the IMPAC Action Plan for the RCMP. Planning Branch responsibilities for the annual development of a "Strategic Overview" will include the evaluation and analysis of costs and benefits in order to arrive at courses of action advocated in the Strategic Overview. |
| 10.64 | The RCMP should ensure that operational plans for program areas define total resource requirements and expected results in measurable terms to the extent practicable, and policy centres should report on actual results achieved compared to plans. | Agreed. This recommendation has been incorporated as the objective of a major component of the plan and timetable for the IMPAC Action Plan. |
| 10.68 | The RCMP should ensure that objectives for its operational and support programs are defined as precisely as possible to facilitate planning, management control and program evaluation. | Agreed. Plans for the IMPAC Action Plan incorporate projecting and initially reporting upon expected quantified demands for operational and support services and providing actual quantified results and use of resources in relation to plans as the year unfolds. This is seen to provide accountability for plans and results to the many governments served by the Law Enforcement Program. |
| 10.74 | The RCMP should review the defined role and actual functions of the "C" Directorate policy centres for consistency and ensure that their program responsibilities are clarified. | The Force was aware of the issue, and action is already under way. |

Recommendations

RCMP's Comments

Measurement of Program Effectiveness

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| 10.78 The RCMP should ensure that the program evaluation branch includes a core of skilled evaluators. | Agreed. The RCMP is seeking the services of a skilled methodologist to accelerate staff development in evaluation skills. |
| 10.82 Program evaluators should fully examine the clarity of program objectives and the methodological issues relevant to measuring program effectiveness during the evaluation assessment stage so that the appropriateness and reasonableness of conducting such evaluations can be determined before studies begin. | Agreed. This is now being carried out. Clarity of objectives and methodological issues are being addressed prior to attempting evaluations for other program elements. |
| 10.84 The RCMP should develop a policy on distribution and dissemination of program evaluation results to groups outside the Senior Executive Committee. | Agreed. Evaluation results will receive wider distribution for program elements for which the value of evaluation is clearly established. Distribution will be more closely held for program elements whose evaluation results are less clear in terms of value. This action will contribute to development of a dissemination policy. |

Performance Measurement and Control

- | | |
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| 10.95 The RCMP should ensure that the current projects to replace or supplement the OPMS, UCR and C75D systems take into account the needs of divisions and program managers for workload and performance data and include appropriate controls to ensure completeness, accuracy and timeliness of data produced. | This recommendation is identified for attention in the IMPAC Action Plan. |
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Recommendations

RCMP's Comments

10.97 The RCMP should ensure, through its "C" Directorate policy centres, that workload and performance measures developed by divisions are assessed for their potential Force-wide application.

Agreed. The value of this recommendation is recognized, and it will be addressed.

10.99 The RCMP should establish tentative investigation objectives and time and cost estimates for long, complex investigations. Actual time taken and money spent should be compared against forecast and used to monitor performance, establish a better data base and supplement subjective judgement.

Agreed. This is currently carried out by some Divisions for major investigations and involves a very labour intensive manual collection of data. The IMPAC Action Plan will address the feasibility of applying project codes (now used to collect all but pay costs for major projects) to person-hours applied to major investigations. Given the feasibility to collect the desired data in a non-labour intensive manner, "C" Directorate will develop policy guidelines to enable Divisions to establish objectives and to receive reports measuring inputs and results for major cases.

Internal Audit

10.107 The Headquarters Audit Branch should clarify documentation standards for audit programs and working papers and should introduce related training and a quality review process to assure adherence to such standards.

Agreed. Revised documentation standards and indexing for working papers reflect a clear audit program with a quality assurance procedure to ensure conformity with standards. New auditors will receive an Internal Audit Course to be complemented by on-the-job training under an experienced auditor.

10.111 The RCMP should ensure that its program for developing audit standards and methodology for divisional audit units is implemented as quickly as is practicable.

Policy work has been completed and revisions to the Administrative Manual will lead to early implementation.

Recommendations

RCMP's Comments

Electronic Data Processing

10.121 An EDP Steering Committee should be established with responsibility for EDP matters, such as policy, systems development priorities, key project monitoring, performance monitoring and related concerns such as staffing.

Agreed. The Senior Executive Committee has been providing direction on EDP matters, but a Steering Committee should be able to serve the Force better. Details of structure and terms of reference to be considered on a priority basis.

Financial Management and Control

10.128 The RCMP should ensure that its financial reporting system meets the needs of staff at the Headquarters and divisional levels.

Agreed. The Financial Management System (FMS) project is being undertaken to meet the financial reporting needs of staff at Headquarters and division levels, and for our central agency reporting interface. Summarized financial reporting information from FMS will become the financial component for integrated management reporting incorporated into the IMPAC Action Plan.

Payroll Costs Management

10.133 The RCMP should determine the most appropriate period for human resource planning, and further review the concepts of career planning and specialization to optimize the development and use of human resources.

Agreed. A work plan and timetable will be developed to address and, if it is feasible, to increase the period of human resource planning for the large general police skills group from three to five years. Career planning for specialist areas will focus upon how to increase advancement opportunities and minimize losses of expertise through merging similar specialty career streams.

10.139 The RCMP should ensure that studies of alternatives to meet training needs include estimates of development and instruction costs.

Agreed. Costing systems and reports for development and instruction are being standardized across the public service. These systems will provide an improved data base to address alternatives to meet training needs initially for RCMP public servants and subsequently for police categories.

Recommendations

RCMP's Comments

10.140 The Training and Development Branch should accumulate and report costs for course development and instruction.

Agreed. These will be accumulated to meet both internal and external needs.

10.143 In identifying its information requirements, the Public Service Personnel Branch should determine the feasibility of integrating the required personnel data into an automated human resource information system.

Agreed. An automated human resource information system will be developed if feasible and proposed to the EDP Steering Committee (10.121). Central agency initiative (similar to 10.139) will be closely monitored to avoid duplicate resourcing by an agency with a relatively small public service cadre.

NATIONAL MUSEUMS OF CANADA

NATIONAL MUSEUMS OF CANADA

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NATIONAL MUSEUMS OF CANADA

Introduction

The Corporation

11.1 The Corporation of the National Museums of Canada was established in 1968 by the National Museums Act (*R.S.C. 1970, c. N-12*). In addition to setting up the office of the Secretary-General, the Act recognized four institutions: the National Gallery of Canada, a museum of fine arts; the National Museum of Man, which includes the Canadian War Museum, and where the story of Man is retold through archaeology, ethnology, folk culture and Canadian history; the National Museum of Natural Sciences, holding collections in the fields of botany, zoology, paleontology and mineral sciences; and the National Museum of Science and Technology, which also houses the National Aeronautical Collection.

11.2 The head office of the National Museums of Canada is in Ottawa. The Corporation is directed by a board of 14 trustees and, since 31 July 1980, has reported to the Minister of Communications. It is designated as a departmental corporation in Schedule B of the Financial Administration Act.

11.3 The National Museums Act sets out the purpose of the Corporation as follows: "to demonstrate the products of nature and the works of man, with special but not exclusive reference to Canada, so as to promote interest therein throughout Canada and to disseminate knowledge thereof." The sub-objectives in the Estimates more specifically express the global objective:

- to acquire objects, artifacts and works of art by field work and purchase;
- to classify, preserve, develop and maintain the collections relative to the products of nature and works of man;
- to conduct basic research including analysis and interpretation of data on the collections and methods of preservation;
- to exhibit objects and artifacts of national cultural and scientific importance in an attractive and interesting presentation to the public to stimulate, educate and inform; and
- to democratize and decentralize museum activities by developing the best possible distribution of cultural resources through a network of museums and providing assistance in restoration and conservation, display and financial support.

11.4 The first four sub-objectives describe what are universally recognized as the essential functions of all museums: collection, preservation, research and the dissemination of knowledge. The fifth states the functions arising from the adoption of the National Museum Policy by Cabinet in 1972.

Organization

11.5 The National Museums Act provides for an organization made up of three components: the Board of Trustees, the four museums and the Office of the Secretary-General. The members of the Board of Trustees are appointed by Governor in Council and meet every three months. None of the members, however, performs his or her duties on a full-time basis.

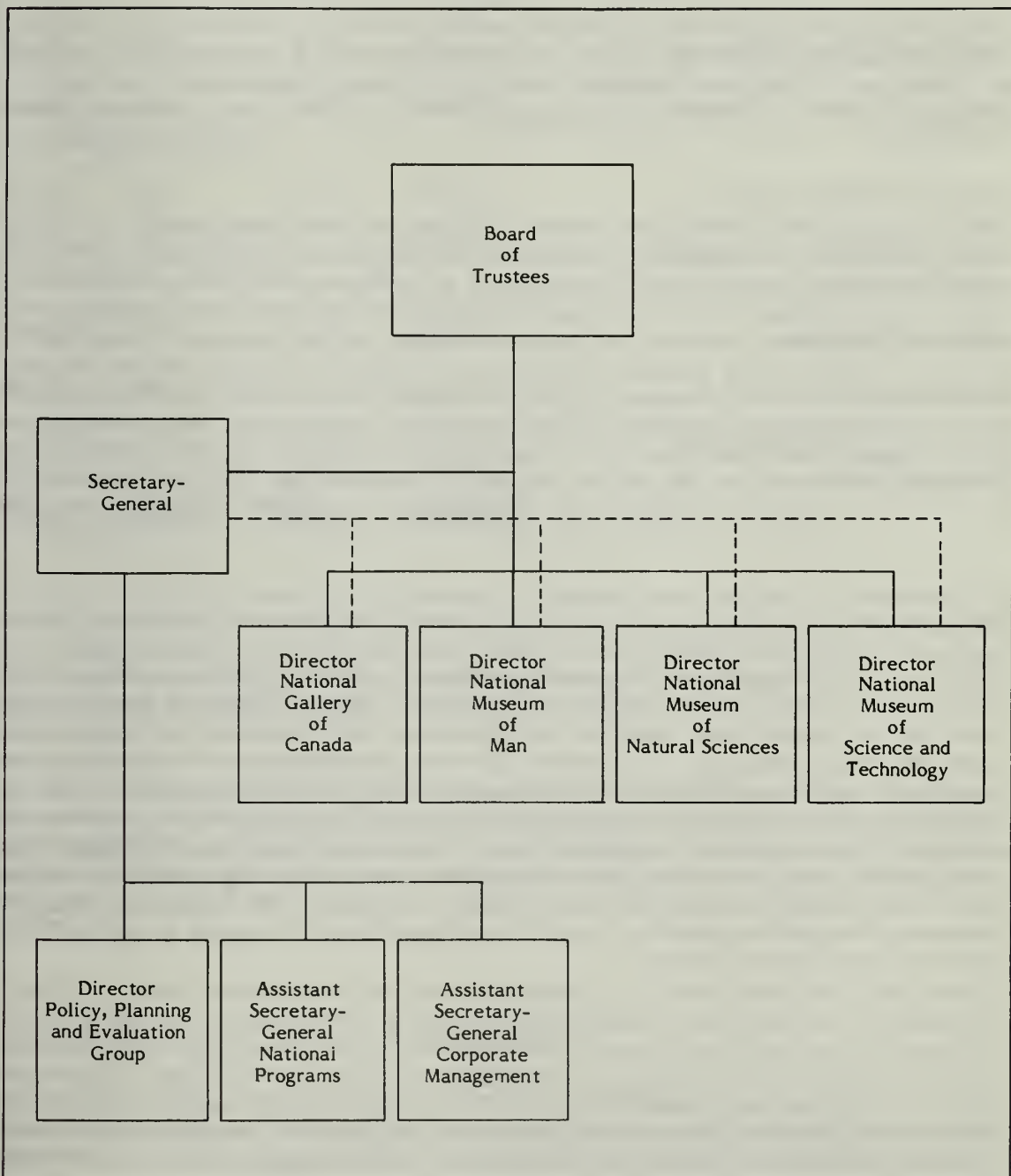
11.6 There is a director for each museum, appointed by Governor in Council, who directs the activities of the museum. The Secretary-General is also appointed by Governor in Council and, under the Corporation's by-laws, is designated as chief executive officer. He is not a member of the Board of Trustees.

11.7 The Office of the Secretary-General includes Central Services and National Programs. Central Services include personnel, finance, administration, security and several other support and technical services. The National Programs Branch is responsible for implementing the National Museums Policy and is made up of a co-ordination division and five directorates:

- Museum Assistance, a program that provides financial support in the form of grants and technical assistance to museum organizations;
- the Canadian Conservation Institute, a laboratory for research into methods of conservation and restoration where highly specialized work is performed;
- the National Inventory Program, which has the goal of compiling a computer-based inventory of the scientific and cultural collections held in Canada's museums;
- the Mobile Exhibits Program, which sponsors caravans that travel across the country with the goal of stimulating curiosity, opening new horizons and enriching Canadians' cultural experience; and
- the International Program, which co-ordinates international exhibitions touring Canada and Canadian exhibits abroad.

11.8 The four museums, National Programs and Central Services will be referred to throughout this chapter as the six components of the National Museums of Canada.

NATIONAL MUSEUMS OF CANADA
SUMMARY ORGANIZATION CHART - 31 MARCH 1981



Resources

11.9 The expenditures forecast and the person-years authorized for each of the activities of the National Museums of Canada were set out in the 1980-81 Estimates as follows:

	<u>Expenditures</u> (thousands of dollars)	<u>%</u>	<u>Person-</u> <u>years</u>	<u>%</u>
National Gallery of Canada	\$ 6,950	13.2	212	21.0
National Museum of Natural Sciences	5,401	10.3	127	12.6
National Museum of Man	8,156	15.6	195	19.4
National Museum of Science and Technology	3,897	7.4	129	12.8
National Programs	19,768	37.7	193	19.3
Administration	5,264	10.0	150	14.9
Contributions to Employee Benefit Plans	<u>3,025</u>	<u>5.8</u>	<u>-</u>	<u>-</u>
	<u>\$ 52,461</u>	<u>100%</u>	<u>1,006</u>	<u>100%</u>

Environment

11.10 The nature of the work carried out by the National Museums of Canada poses special problems for management. The definition of heritage, the selection of objects to be acquired and preserved, the application of conservation methods, the orientation of research and the dissemination of knowledge are activities where aesthetics, creativity and other subjective values play an important role. The main activities of museums belong to artistic, cultural and scientific fields where the application of strict management techniques has traditionally been viewed as hindering rather than supporting creativity. Managers are therefore expected to maintain a balance between the discipline necessary for good management and the independence necessary in the artistic, cultural and scientific fields.

Audit Scope

11.11 Our audit concentrated on the management systems of the National Museums of Canada. We reviewed objectives and policies, the definition of roles and responsibilities in the National Museums of Canada, and systems for planning,

controlling and evaluating museum functions. We also reviewed human resource management, financial management, internal audit and reporting to Parliament.

11.12 We did not include in our audit any qualitative issues concerning arts and culture.

Summary of Audit Observations

11.13 We concluded that the effort devoted to carrying out museum activities was not supported by a clearly defined management structure and effective management procedures, even though the National Museums Corporation has made repeated attempts, since its establishment in 1968, to rationalize its operating framework.

11.14 During our audit, we noted a number of cases of overlapping jurisdiction and responsibilities at senior levels in the organization. For example, the Secretary-General is responsible for establishing and providing security services for museums, while museum directors are responsible for the safekeeping of their collections. Because the Secretary-General and museum directors all report directly to the Board of Trustees, any misunderstanding with regard to security must be brought before the Board; no single manager has full authority in management matters. In effect, this situation gives general management responsibilities to a Board of Trustees that meets officially only four times a year. Overlapping and lack of precision in defining duties do not promote operational efficiency or accountability of managers for their respective tasks.

11.15 A set of policies is essential to ensure some degree of consistency in action, especially where managers' roles and duties have not been clearly defined. Our audit showed that the National Museums of Canada had begun developing policies in some areas; however, a number of major activity sectors did not have a policy framework approved by the Board of Trustees.

11.16 Considerable progress has recently been made toward better planning in the National Museums of Canada. Achievements have included establishment of a Policy, Planning and Evaluation Group, adoption of a statement of intent that serves as a strategic plan, and revision of the budgetary system on the basis of museum functions.

11.17 Our examination of the statement of intent and the new budget planning system revealed that a great deal remains to be done to complete the general planning framework for the National Museums of Canada. It would be particularly desirable to translate objectives more clearly into measurable terms and to link budget forecasts more closely to priorities, and priorities to objectives. In the absence of such links, it is difficult to establish accountability, and efforts to evaluate program effectiveness may be limited to a simple review of services without reference to the objectives of the National Museums of Canada.

11.18 Our audit of collections management showed that the inventory was incomplete and that documentation was insufficient. Efforts have been made to improve these areas, particularly at the National Gallery.

11.19 In 1972, the National Museums of Canada set up a program known as the National Inventory with the goal of compiling a computer-based inventory of all objects held in Canada's museums. Eight years of work involved expenditures in the order of \$7.5 million, excluding \$4.3 million granted to Canadian museums through the Registration Assistance program and \$1.2 million of services rendered through the Youth Assistance program. However, National Inventory program managers still had not fully evaluated the task at hand, nor had they set up a schedule for completion. It was, therefore, impossible to estimate realistically the progress that had been made. Because the computer systems were already overloaded, the program had been refusing new clients for the past three years.

11.20 In June 1981, program management proposed a change of computers and software to remedy the situation. The proposal was not, however, based on a thorough feasibility study or a clear definition of the needs the program should be capable of meeting.

11.21 In the areas of research and the dissemination of knowledge, we observed that there were weaknesses in the mechanisms for establishing objectives and priorities for planning and control. The results of publication activities illustrate the consequences of such weaknesses. For example, publications were frequently brought out at great expense but, because there was no market for them, they piled up in warehouses.

11.22 Although security services seemed to be adequately managed despite some overlapping responsibilities, the protection of the collections is not necessarily ensured because of the inadequacy of the buildings housing them, which is beyond the control of the National Museums. Collection items are dispersed throughout many of the 43 premises of the National Museums of Canada. The state of a number of these premises is such that the items stored in them deteriorate and are constantly threatened by fire, flood, mould, dryness and so on. Furthermore, several premises have been condemned by the Dominion Fire Commissioner, the Department of National Health and Welfare, and the Department of Labour. National Museums management carried out, with the Department of Public Works, a study of the accommodation needs of the four museums and, in early 1981, presented to Cabinet a number of proposals for solving accommodation problems.

11.23 In 1979 and 1980, the National Museums of Canada ordered and carried out a number of studies on various aspects of human resource management. Following those studies, the Museums began a complete reorganization of the Personnel Administration Branch. It is expected that this Branch will soon be able to help managers gain the knowledge and skills required to improve their management of human resources.

11.24 Since our 1977 Financial Management and Control Study, financial management in the National Museums of Canada has improved. However, we found there were still some major shortcomings with regard to control of revenues and assets.

11.25 In general, the internal audit function of the National Museums of Canada met criteria established by our Office and conformed to the internal financial audit standards developed by the Office of the Comptroller General. However, there were still some improvements required, particularly regarding adherence to plans and the follow-up of audit findings and recommendations.

Observations and Recommendations

Roles and Duties

11.26 As mentioned previously, the Governor in Council appoints the Secretary-General and the museum directors, under the National Museums Act. The Act describes their general responsibilities, but it is up to the Board of Trustees to specify their duties, and these are found in the Corporation's by-laws.

11.27 Section 7 of the National Museums Act stipulates that, "subject to the by-laws of the Corporation, a director of a museum has, on behalf of the Board, the direction of the activities of the museum for which he is appointed director". Section 8 provides that, "subject to the by-laws of the Corporation, the Secretary-General has, on behalf of the Board, the direction and management of the business of the Corporation in all matters that are not by this Act or by the by-laws specifically reserved to the Board, a committee of the Board or a director of a museum". A commonly held view in the Corporation is that these sections confer absolute authority on the four directors for the operations of their museums and residual authority on the Secretary-General, with all five people on an equal footing before the Board.

11.28 Under authority of section 13, the Board of Trustees passed a by-law to define the duties of directors and the Secretary-General. The by-law makes the Secretary-General both the representative of the Board between meetings and the chief executive officer of the Corporation for the purposes of the Financial Administration Act, the Public Service Employment Act and the Official Languages Act. This implies authority over the museums and their directors.

11.29 It is not possible to define roles and relationships or to establish accountability among these positions and between them and the Board of Trustees on the basis of the National Museums Act and the Corporation's by-laws. The Board is, therefore, frequently called on to serve as arbitrator, particularly where there are policy conflicts between Central Services and other components of the organization.

11.30 Security of collections provides an example of this problem. The Secretary-General is responsible for establishing and providing security services to museums; museum directors are responsible for safeguarding their collections. Any misunderstanding regarding security must be brought before the Board of Trustees, as no single manager has full and indisputable authority in this area. The same holds true for almost all areas of management.

11.31 Consequently, there have been undue delays in implementing appropriate planning, co-ordination and management control mechanisms. Since the Board of Trustees holds a regular meeting only once every three months, it finds itself faced with excessive additional work. It is evident, therefore, that the sole authority in policy and co-ordination matters -- that is, the Board of Trustees at its plenary meeting -- can act only sporadically.

11.32 The Board has set up five advisory committees, one for each museum and one for National Programs. The committees, made up of "members of the Board and other persons", provide advice on all matters that the directors present. The National Gallery advisory committee also has decision-making powers regarding acquisitions.

11.33 Since 1970, successive Boards of Trustees have commissioned reorganization studies and have had repeated discussions on the redefinition of the roles of the Board, its Chairman, advisory committees, the Secretary-General and museum directors. No action had been taken on these matters at the time of our audit.

11.34 *The Board of Trustees should review the organization studies already carried out, draw appropriate conclusions from them and recommend, to the minister responsible for the National Museums of Canada, an appropriate clarification of the roles, duties, authority and responsibilities within the Corporation.*

Policies and Planning

11.35 Policies. A set of policies issued by the Board of Trustees would make it possible for the components of the organization to act with some degree of consistency, especially where managers' roles and duties have not been clearly defined. However, the policies in effect at the time of our audit did not cover all the Corporation's major activity sectors, such as research, public programs and publications. The Board of Trustees had not established any mechanisms to ensure that the policies it approves are consolidated in a manual, communicated to managers, and implemented. Therefore, the direction of the Corporation's activities was unclear because it was not guided by a set of policies from the Board of Trustees, resulting in a lack of consistency and a lack of assurance that the wishes of the Board were being carried out.

11.36 *The Board of Trustees should ensure that its policies cover all major activity sectors, that they are consolidated in a manual and communicated to all managers, and are monitored and evaluated to assess compliance and continuing appropriateness.*

11.37 **Planning.** Three major steps toward better planning have recently been taken within the Corporation. The first of these measures was the establishment in 1977 by the National Museums of Canada management of the Planning Secretariat, which was replaced by the Policy, Planning and Evaluation Group (PPEG) in 1979, reporting directly to the Secretary-General. It reviewed, in particular, the activities performed by National Programs, also responsible to the Secretary-General. The Group was also responsible for co-ordinating the preparation of a statement of intent and a multi-year operational plan, in addition to its program evaluation activities, which will be discussed in the next section.

11.38 In December 1980, the Board of Trustees took a second step toward better planning by adopting the draft statement of intent entitled "A National Museum Policy for the Eighties". The document restated general objectives and established the following priorities: improvement of buildings; clarification of government-museums relations; modification of organizational structures; increase of resources; restructuring of the Museum Assistance Program; management of collections; conservation; research; and improvement of public programs.

11.39 None of the planning documents available at the time of our audit contained an analysis of the alternatives that could be taken to reach the proposed objectives. There was no explicit plan of action, and only by examining the budget could we conclude that the plan of action consisted of continuing activities under way since 1972. No clear links could be established between the budget and priorities, or between priorities and objectives.

11.40 The third main element of comprehensive planning was the modification of the budgeting system, in accordance with Treasury Board directives, and the preparation of the first multi-year operational plan, for the 1982-83 fiscal year, based on this new system. The operational plan contains a breakdown of resources for each component by museum function, which meets the need for management information.

11.41 The new format for presenting the Estimates could be the first step toward the development of a performance information system for the National Museums of Canada. However, the operating plan included only a sketchy account of the Corporation's plans for use of the resources available to it. The indication of the nature, frequency or scope of the activities that would be initiated or continued during the fiscal year was not sufficient.

11.42 Moreover, the statement of objectives in the operating plan was not specific enough to be used for performance measurement. For example, the objectives, "to promote high professional standards in all fine arts museum activities" and "to classify, conserve, develop and maintain museum collections" were not sufficiently precise to be used for this purpose. Further, the plan did not show how the objectives were linked with the statement of intent.

11.43 In an attempt to evaluate the performance of the components of the Corporation, the Policy, Planning and Evaluation Group had begun to develop performance indicators in co-operation with the museum directors. However, because objectives were not sufficiently precise and measurable and the planning and control systems did not make provision for a comparison of resource utilization and results with the plans, performance evaluation was not possible and the Corporation's activities could not be effectively controlled.

11.44 *The National Museums of Canada should complete its planning and control work by:*

- *developing a strategic plan including clear, precise objectives, a critical review of possible action plans, a description of the approved plan of action, and an illustration of the links between the plan of action, priorities and objectives;*
- *including further details in its operational plans to show the activities that will be initiated or continued during the year and the links between resource allocation and the approved action plan; and*
- *defining appropriate performance indicators.*

Program Effectiveness Evaluation

11.45 Program evaluation is one of the main responsibilities of the Policy, Planning and Evaluation Group referred to in the previous section. The Group carried out a series of evaluation studies dealing primarily with National Programs and developed an evaluation policy and plan for the period 1981-1985. An annual evaluation plan was also drawn up for the first fiscal year in that period.

11.46 Because of their nature, many activities of the National Museums of Canada do not lend themselves to short-term effectiveness evaluation. This applies particularly to objectives relating to collection, conservation and research. Nonetheless, some other museum functions are relatively easy to evaluate, and proven techniques exist to do so. Such is the case, for example, in the area of public programs -- exhibitions, presentations and publications. We found, however, that the activities of the four national museums in these areas had not been evaluated because the Policy, Planning and Evaluation Group had focused its attention on National Programs.

11.47 In general, the studies conducted by the Group assessed whether operational objectives had been achieved but did not, for the most part, measure the effects of the programs.

11.48 *The National Museums of Canada should carry out a systematic evaluation of its activities in relation to its objectives.*

Museum Functions

11.49 In this section, we discuss the management of the museum functions of collection, research and dissemination of knowledge. Our review of the conservation function was combined with that of collection.

11.50 **Collection.** The Board of Trustees recently approved a comprehensive collection policy which includes an acquisition plan for each museum and covers almost every area of interest. The plan did not specify the respective roles and priorities of each museum, with the result that it was not possible to identify their common areas of interest or to assign specific areas of activity to each one to minimize duplication and underutilization of the collections. Without such a plan, each case of overlapping responsibilities must be considered separately. The case of contemporary native art, for example, required specific agreement between the National Museum of Man and the National Gallery. Many other cases remain unsettled for want of specific agreement between the museums concerned.

11.51 In accordance with the new policy, the national museums have started to develop procedures for acquiring, documenting, insuring, handling, maintaining, storing and safeguarding their collections.

11.52 The acquisition process recommended in the collection policy related only to methods of acquisition. It did not require that each acquisition be made in accordance with a predetermined plan and did not take into account the potential use of the objects or the museums' capacity to conserve them and to restore them if necessary. Further, the acquisition process did not require that even basic documentation be prepared before the decision was made to acquire a particular item. This documentation should include at least a description of the object, its history and the rationale for its acquisition.

11.53 Although the policy was specific with regard to procedures and criteria, it did not clearly identify who was responsible for its implementation and did not provide for any control mechanisms. The imprecise definition of roles and responsibilities and overlapping of authority will undoubtedly increase the difficulty of exercising necessary controls.

11.54 Documentation on collections includes the inventory records and the most recent information available about the objects, their location and their condition. The catalogue of the collections in the national museums was incomplete. At the National Gallery of Canada, the catalogue of the photographic collection was not complete, and the number of items making up the collection could only be approximated. The same was true in the National Museum of Science and Technology and the National Museum of Man, where many objects had not yet been inventoried. We did not review this aspect of the collection function at the National Museum of Natural Sciences. Information in the collection records was not standardized in any of the museums and was insufficient everywhere except at the National Gallery of Canada.

11.55 Establishing priorities for acquisition and co-ordinating purchases thus become difficult. Unrecorded items may be lost; if this happens the collection may lose its significance and value. Finally, storage conditions and capacities are almost impossible to assess.

11.56 Collections were not examined regularly to assess their condition and, if necessary, take appropriate measures. Annual or cyclical inventory checks were not conducted. Inspections, made at random, were not always reported. This situation increased the likelihood of loss.

11.57 Because of insufficient documentation, the national museums were not fully aware of the size, value and condition of their collections. It was therefore difficult to make informed decisions on purchases, acceptance of gifts and disposal of objects. This state of uncertainty encouraged the tendency to acquire as much as possible and to dispose of as little as possible, which increased costs for storage and security.

11.58 In summary, the national museums had not rationalized their main activity -- the management of objects under their care. They had an incomplete knowledge of their current collections and had not taken the measures necessary to fill the gaps in their knowledge or to plan the development of the collections and protect them from loss and deterioration.

11.59 *The National Museums of Canada should improve its acquisition process and specify its collection priorities. It should complete its inventory and conduct regular inspections of its collections.*

11.60 Because of the large number of objects in Canadian museums' collections and the importance of knowing their history, storage location and condition and the environment required for their conservation, the National Museums of Canada concluded that a computer-based inventory could prove to be a suitable collection management tool.

11.61 Since its establishment in 1972, the National Inventory program has concentrated on developing a complete inventory of works of art and cultural objects in all of Canada's museums, which would be accessible to researchers, museum managers and the general public.

11.62 At the end of the fiscal year 1980-81, the cumulative operating expenses since 1972 for the National Inventory program amounted to \$7.5 million, according to National Museums of Canada estimates. This did not include contributions to Canadian museums of \$4.3 million through the Registration Assistance program and \$1.2 million of services rendered through the Youth Employment program.

11.63 Although the National Inventory program had been in operation for eight years, management could not provide precise figures on the number of potential client museums, the number of objects or groups of objects to be inventoried or the size of the data base required. Although the program documentation refers to 1,300 Canadian museums, this number has never been confirmed. Available documentation provides estimates of 25 million and 40 million objects to be inventoried but, since many of the objects may be grouped together, it is virtually impossible, at the present time, to estimate the size of the data base that must be created and maintained. Program managers could not make reliable estimates of the number of transactions that establishing and maintaining the data base and retrieving information from it would entail.

11.64 Since these figures were not available, management could not give a schedule for completion of the project or an estimate of the costs of implementation. It was, therefore, impossible to estimate how far the work had progressed, although management suggested a figure of five per cent completion in March 1980.

11.65 The collections of 150 Canadian museums were already completely or partially inventoried. The National Inventory program had not accepted any new clients for the past three years. It was not able to complete the inventories it had begun and was experiencing major delays in updating the data already in the system.

11.66 This situation was attributable to the fact that the scope of the program has never been defined. National Museums has recognized this and, at the beginning of 1981, decided to postpone temporarily all decisions pertaining to the data processing activities of the National Inventory program.

11.67 During our audit, we were informed that management was considering a project to change data processing methods and equipment. The Board of Trustees agreed to the project at its June 1981 meeting. The project deals mainly with changing the computer and the software; this would greatly increase the

system's capabilities but would not, by itself, make it possible to foresee the completion of the National Inventory.

11.68 Although many studies of this program have been undertaken in the past few years, their scope has not been broad enough. We believe, therefore, that, before making a major investment in new data processing methods and equipment, the National Museums of Canada should undertake a comprehensive feasibility study of the whole National Inventory program. This study should include identifying the program's scope and extent and available alternatives; analysis of costs and benefits, a proposal for the preferred option, and a complete implementation plan.

11.69 *The National Museums of Canada should determine the needs to which the National Inventory program should be capable of responding and conduct a feasibility study to ensure that an informed decision is made regarding the most appropriate method of achieving the program's objectives.*

11.70 **Research.** The National Museums of Canada had little information about the human and financial resources devoted to its research activities. However, estimates show that research accounted for 31 and 25 per cent respectively of the budgets of the National Museum of Man and the National Museum of Natural Sciences and approximately 23 per cent of the budget of the Canadian Conservation Institute.

11.71 To ensure that research efforts are properly co-ordinated and directed toward the most appropriate goals, there is a need for priorities to be established in a comprehensive research plan. This would reduce the risk that research would be oriented solely toward the interests of a particular scientist or curator in a given field rather than toward specific objectives. We found that no such plan existed for the Corporation as a whole or for any of the components that carry out research.

11.72 *The National Museums of Canada should determine the areas in which research efforts should be concentrated to attain specific objectives; these objectives should be included in a comprehensive research plan.*

11.73 In addition to the need for a comprehensive plan and operational plans for research, due regard for economy and efficiency in research projects requires the following steps: the development of project proposals; project selection; detailed planning; final approval; implementation; and input of project data in the management information system for control and evaluation purposes.

11.74 Each of these steps must be carefully controlled according to directives which specify management goals and expectations for researchers.

Furthermore, the research process must be documented. However, we did not find any documented evidence that these steps had been followed. For example, we did not find any files for major research projects containing authorizations, descriptions of projects, project objectives and methodology, estimates of the resources required or schedules.

11.75 It is easier to control the progress of projects when this type of basic information is incorporated in a management information system, allowing achievements to be compared with original plans, variances to be analysed, and corrective measures to be taken as required. Such a system did not exist, and control, which varied from one museum to the next, and sometimes even from one division to the next in the same museum, was exercised informally.

11.76 *The National Museums of Canada should develop and implement an appropriate management process for research projects.*

11.77 **Dissemination of knowledge.** *Exhibitions.* Permanent and temporary exhibitions presented by the National Museums of Canada may be completely or partially prepared by the museums or rented or borrowed from other museums in Canada or abroad. The choice of an exhibition from all the possible alternatives requires that a museum's role and objectives be clearly stated, that its target audience be defined and that selection criteria be established for the extent and duration of the exhibition and the possibility of putting it on tour. There must be clear objectives for the exhibition itself, in line with those of the museum. A detailed activities plan and a budget of related costs must be prepared before an exhibition is selected. Without these elements, it is difficult, if not impossible, to allocate resources properly for exhibitions.

11.78 Efforts have recently been directed toward choosing and organizing exhibitions and controlling their preparation at the National Gallery of Canada and the National Museum of Natural Sciences. We found no documentation at the National Museum of Science and Technology that would allow us to ascertain whether the conditions described in the preceding paragraph regarding exhibition choice and organization were being met. We did not examine this activity at the National Museum of Man.

11.79 The changes under way will make it possible to improve the allocation of resources for exhibitions at the museums concerned but, in the absence of objectives for individual museums, specific aims for the exhibitions, or appropriate evaluation mechanisms, selection of exhibitions can only be arbitrary.

11.80 *The four national museums should specify the operational objectives and implementation and control procedures for exhibitions and develop indicators for measuring the achievement of these objectives.*

11.81 *Publications and boutiques.* To enable it to reach its objective of "disseminating knowledge", the National Museums of Canada is authorized by the Act to "arrange for the acquisition or publication and the sale to the public of books, pamphlets, replicas and other materials related to its purposes". Under this authority, the National Museums operates boutiques and carries on an extensive publishing program. At the end of 1980, approximately 1,200 publications and 300 miscellaneous articles produced by or for the National Museums of Canada were available. However, there was no policy or overall planning for this activity.

11.82 Planning for publications did not cover all the elements required for making decisions or controlling and evaluating the product, such as content, target audience, type of presentation desired (format, binding, illustrations and so on), estimated unit cost, sale price, press run and date of publication.

11.83 We were informed that the basic specifications for a number of recent publications were modified during the production process with the result that the publications were very different from those planned at the outset. Because of a lack of planning, exhibition catalogues, for example, were frequently not available during much of the exhibition, at the time when public interest was at its peak. Other examples are more complicated. One book, originally intended for sale to young people at a price of \$10 to \$13, was finally published in a cloth-covered case-bound deluxe edition, containing a number of polychrome illustrations and 20 per cent more pages than planned. It was priced at \$30 because production costs had exceeded estimates by 28 per cent, even though the number of copies produced was 19 per cent fewer than planned. The target audience was not reached and most of the books ended up on shelves in the warehouse. In other instances, to reduce unit costs and justify a reasonable sale price, print runs were increased without considering the demand for the publication. In a number of cases, high additional costs and considerable delays were incurred because of unexpected changes in specifications, particularly for the quality or number of illustrations.

11.84 In the absence of sufficiently detailed and officially approved plans, it was difficult to estimate the cost of variances between the original plan and the final product, to determine whether those variances had been officially approved and whether they had contributed to the attainment of the objectives pursued.

11.85 Costs of publication were distributed among the budgets of a number of responsibility centres and one special account; this situation did not facilitate realistic cost analysis or sound management. The practice of lumping together in a single special account part of the expenditures and total receipts for the publications of three museums and the four museum boutiques made it impossible to get a clear picture of these operations.

11.86 Our audit showed that the receipts of \$401,000 from the sale of publications in the 1980-81 fiscal year covered only about 17 per cent of those production costs that could be readily identified in the accounts and the operating costs of the responsibility centres whose main activities are publishing and distribution of publications. We could find no clear policy regarding cost recovery for publications.

11.87 In our analysis, we could not take into account a number of cost elements, the largest of which was writing by in-house authors, for whom there were no time records. Our estimate of expenditures also excluded the cost of managing the publishing activity, which occupied a significant task group for the entire year, and rent, photocopying, pension funds and other general expenses.

11.88 *The National Museums of Canada should develop and implement a Corporation-wide policy for the production and sale of publications. The policy should specify a planning process that would allow informed decisions to be made, control mechanisms that include a calculation of total costs and clear standards for subsidizing publications.*

11.89 Each museum has a boutique where books, souvenirs and other items are sold to visitors. Most of these goods are acquired from commercial enterprises. Some National Museums of Canada publications are also sold, but these sales account for only a small proportion of the boutiques' receipts.

11.90 Expenditures for the boutiques, like those for publications, were divided among the special account and operating budgets. The cost of goods sold was entered in the special account; salaries of employees and some other expenditures directly incurred in operating the boutiques were included in operating budgets. Rent, administrative expenditures and general expenses were not broken down in the accounts, and we were, therefore, unable to determine their amounts. The boutique-related expenditures that we identified in the special account and operating budgets of the National Museums of Canada totalled \$738,000 for the 1980-81 fiscal year. Over the same period, the proceeds from sales in boutiques were \$602,000.

11.91 We could not find any policy or directives governing boutique operation and indicating profit or subsidization objectives.

11.92 *The National Museums of Canada should develop and implement a policy for boutique operation and production and sale of souvenirs. The policy should specify control mechanisms that include a calculation of total costs and set specific profit or subsidization objectives for boutiques.*

Security and Protection of Collections

11.93 The National Museums of Canada collections include many rare and irreplaceable objects which bear witness to our cultural, historical, scientific and natural heritage. The museums are entrusted with preserving and studying these objects and making them known to the public. In this light, protecting collections from loss and deterioration is a common concern of museum scientists and security staff.

11.94 The Security Services Branch provides security advice, resources and services to the four museums, the National Programs Branch and Central Services. The security policy of the National Museums of Canada, which was approved in December 1979, had still not been communicated to staff at the time of our audit. It establishes three priorities for protection: people, collections and buildings. In its 1980-81 budget, approximately \$10 million and 200 person-years were budgeted for security services. In the Estimates, security expenditures and person-years are distributed among the budgets of the six components of the National Museums of Canada.

11.95 The management of security functions, services and activities appeared to be satisfactory. However, our audit revealed two sources of weakness in protection measures: the overlapping responsibilities at the management level, as noted previously; and the inadequacy of buildings housing the collections, as described below, which is beyond the control of the National Museums. Security measures, which are based on general criteria agreed to by all parties, were not implemented in a uniform manner in all components of the Corporation.

11.96 Preservation and protection of collections are made more difficult because work, display and storage facilities are of poor quality and are dispersed throughout a large number of locations. The buildings are unsuitable for some methods of fire, theft and vandalism prevention or detection and are impossible to maintain at the constant temperature and humidity required to preserve certain objects. According to the Department of National Health and Welfare and the Department of Labour, a number of the premises are very unsafe for staff and the collections because of the presence of the large quantities of toxic and inflammable substances required for preservation, research and restoration. A single accident could result in the loss of almost all the collection in a particular discipline. Although dispersal of the collection may limit damage in the event of an accident, it increases the risk of theft and vandalism, adds to surveillance costs and slows down security services in emergencies.

11.97 The National Museums of Canada is aware of this problem and has already presented to Cabinet a number of proposals for solving accommodation problems.

Payroll Costs Management

11.98 In 1979 and 1980, the National Museums of Canada commissioned a number of studies on various aspects of human resource management. Following these studies, it began a complete reorganization of its Personnel Administration Branch.

11.99 At the time of our audit, there was no system for human resource planning, and training needs were not identified on a systematic basis. Human resource information was incomplete and out of date. The reorganization was, however, addressing these problems.

11.100 Systems for management information and human resource planning, appraisal and training were being developed. A procedure manual had been prepared and was scheduled for approval and distribution in the near future. When these systems are in place, the Personnel Services Branch will be in a position to assist responsibility centre managers to define their respective roles in human resource management.

Financial Management

11.101 Management of the financial function is provided by a central financial service reporting to the Assistant Secretary-General, Corporate Management. As well, each museum director and the Assistant Secretary-General, National Programs have financial officers to advise and assist them.

11.102 Financial management in the National Museums of Canada has improved since our 1977 Financial Management and Control Study. These improvements were noted in the IMPAC survey conducted by the Office of the Comptroller General in 1980. They were mainly in the organization and management of the financial function, control of budgets, and the accounting and expenditure control systems.

11.103 **Receipts and accounts receivable.** Forecasting, control and accounting for receipts and collection of accounts were inadequate. By special authorization of Parliament, the National Museums of Canada retains most of its revenue and uses it to finance its publication program and to replenish stock in the boutiques. Since a number of publications must come out on specific dates, it is essential to make accurate forecasts of cash flows to avoid overcommitment.

11.104 We found that the National Museums of Canada did not have an appropriate system for managing its accounts receivable. There were no written procedures for approving or processing orders or making shipments to clients. During the past fiscal year, no statements of account were sent to purchasers, and by the end of the year, accounts receivable totalled \$255,000, an increase of

\$81,000 over the previous year. A similar situation existed with respect to accounts receivable from joint publishing contracts under which books are designed, written and prepared by the National Museums of Canada and are published and distributed by private publishers. These accounts were not followed up systematically, and there was no method for verifying whether royalties paid by co-publishers and distributors were those specified in the contracts.

11.105 *The National Museums of Canada should establish appropriate mechanisms for forecasting cash flows and collecting accounts receivable.*

11.106 **Control of assets.** In our 1977 Financial Management and Control Study, we pointed out that for the most part there was no procedure for the control of fixed assets in the National Museums of Canada. Since that time, measures taken to remedy the situation have been irregular and unco-ordinated and, on the whole, control of fixed assets was still inadequate.

11.107 There were major shortcomings in financial and physical control systems for inventories of publications and boutique stocks. On 31 March 1981, the inventories were worth \$1.8 million and \$360,000 respectively.

11.108 Books on consignment to Canadian and international distributors were included in warehouse inventories, which made it difficult to reconcile inventory records with annual stock-taking. Reconciliation was further complicated by major delays in recording returns from retailers.

11.109 Contrary to common practice in the book industry, there was no policy or procedure in the National Museums of Canada for writing off or revaluing publications that were damaged or outdated or that could not be sold for other reasons. Establishing the value of inventories posed a number of problems: some publications were more than 50 years old and should have been revalued or written off. In some cases, the suggested retail price or the sale price to retailers was less than the production cost; in other cases, production costs were unknown.

11.110 As there was no permanent inventory for boutique stock, financial and physical control of inventories was impossible.

11.111 *The National Museums of Canada should improve the physical and financial control of inventories of all publications produced by the National Museums of Canada and of boutique stock; inventories should be revalued each year and changes reflected in the Corporation's financial statements and management reports.*

Internal Audit

11.112 Since April 1981, the Internal Audit Branch has reported to the Secretary-General. Until recently, the Branch's only employee was the Director; he is now assisted by an auditor.

11.113 During the 1980-81 fiscal year, Branch expenditures were approximately \$203,000. The cost of audits performed under contract by various consultants accounted for 61 per cent of expenditures. In general, the internal audit function met the criteria established by our Office and conformed to the internal financial audit standards developed by the Office of the Comptroller General. These include defining responsibilities clearly, planning audits on an annual and three-yearly basis, bringing internal audit policy to the attention of all managers, and so on. However, we noted that during the first two years of the three-year plan the work schedule was not followed, and a large number of audits had to be postponed.

11.114 The Internal Audit Branch has not conducted systematic follow-up studies on the implementation of the recommendations made as a result of internal audits completed since March 1976. Although the Administrative Manual of the National Museums of Canada requires managers to submit their comments on the recommendations within 30 days, considerable delays were identified in the majority of cases.

11.115 *The Internal Audit Branch should follow up and report on the corrective actions taken in accordance with internal audit recommendations.*

Information for Parliament

11.116 The Office of the Comptroller General is carrying out a revision of the form and content of the Estimates and Public Accounts. When the sections of these documents relating to the National Museums of Canada are reviewed, the following observations should be given consideration.

11.117 The information contained in the Estimates and the Public Accounts describes the main objects of expenditure but is not descriptive of the operations of the National Museums of Canada. We noted that the definition of activities was based on the Corporation's organizational structure, which is useful for identifying the relationship between the amounts allocated and spending authorities. However, from the point of view of accountability, it would be more informative to define activities in relation to basic museum functions. This type of definition would highlight the museums' goals and the activities to which funds are allocated. As mentioned above, the Corporation has initiated a preliminary multi-year operational plan for the 1982-83 fiscal year in which activities are defined according to museum functions. We support this initiative.

Summary of Recommendations and Management's Comments

We were informed by the National Museums of Canada that responses to our recommendations would not be available until after the Board of Trustees had met to consider the audit report. Responses were therefore not available at the time the annual Report went to press.

Recommendations

Management's Comments

Roles and Duties

- 11.34** The Board of Trustees should review the organization studies already carried out, draw appropriate conclusions from them and recommend, to the minister responsible for the National Museums of Canada, an appropriate clarification of the roles, duties, authority and responsibilities within the Corporation.

Policies and Planning

- 11.36** The Board of Trustees should ensure that its policies cover all major activity sectors, that they are consolidated in a manual and communicated to all managers, and are monitored and evaluated to assess compliance and continuing appropriateness.
- 11.44** The National Museums of Canada should complete its planning and control work by:
- developing a strategic plan including clear, precise objectives, a critical review of possible action plans, a description of the approved plan of action, and an illustration of the links between the plan of action, priorities and objectives;

Recommendations

Management's Comments

- including further details in its operational plans to show the activities that will be initiated or continued during the year and the links between resource allocation and the approved action plan; and
- defining appropriate performance indicators.

Program Effectiveness Evaluation

- 11.48** The National Museums of Canada should carry out a systematic evaluation of its activities in relation to its objectives.

Museum Functions

- 11.59** The National Museums of Canada should improve its acquisition process and specify its collection priorities. It should complete its inventory and conduct regular inspections of its collections.
- 11.69** The National Museums of Canada should determine the needs to which the National Inventory program should be capable of responding and conduct a feasibility study to ensure that an informed decision is made regarding the most appropriate method of achieving the program's objectives.
- 11.72** The National Museums of Canada should determine the areas in which research efforts should be concentrated to attain specific objectives; these objectives should be included in a comprehensive research plan.

Recommendations

Management's Comments

- 11.76** The National Museums of Canada should develop and implement an appropriate management process for research projects.
- 11.80** The four national museums should specify the operational objectives and implementation and control procedures for exhibitions and develop indicators for measuring the achievement of these objectives.
- 11.88** The National Museums of Canada should develop and implement a Corporation-wide policy for the production and sale of publications. The policy should specify a planning process that would allow informed decisions to be made, control mechanisms that include a calculation of total costs and clear standards for subsidizing publications.
- 11.92** The National Museums of Canada should develop and implement a policy for boutique operation and production and sale of souvenirs. The policy should specify control mechanisms that include a calculation of total costs and set specific profit or subsidization objectives for boutiques.

Financial Management

- 11.105** The National Museums of Canada should establish appropriate mechanisms for forecasting cash flows and collecting accounts receivable.

Recommendations

Management's Comments

- 11.111 The National Museums of Canada should improve the physical and financial control of inventories of all publications produced by the National Museums of Canada and of boutique stock; inventories should be revalued each year and changes reflected in the Corporation's financial statements and management reports.

Internal Audit

- 11.115 The Internal Audit Branch should follow up and report on the corrective actions taken in accordance with internal audit recommendations.

NATIONAL RESEARCH COUNCIL OF CANADA

NATIONAL RESEARCH COUNCIL OF CANADA

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NATIONAL RESEARCH COUNCIL OF CANADA

Introduction

12.1 The National Research Council of Canada (NRC) is governed by the National Research Council Act (*R.S.C. 1970, c.N-14*). NRC is a departmental Crown corporation and reports to Parliament through a designated Minister, currently the Minister of State for Science and Technology.

12.2 NRC has two operational programs: the Scientific and Industrial Research Program (Research Program) and the Scientific and Technical Information Program (Information Program).

Objectives

12.3 The objective of the Scientific and Industrial Research Program, as stated in the 1980-81 Estimates, is "to provide a national foundation upon which to build for the creation, application and use of knowledge derived from the natural sciences and engineering." The Research Program has four sub-objectives:

- To promote, assist and perform research for the creation of new knowledge derived from the natural sciences and engineering.
- To apply knowledge derived from the natural sciences and engineering to the solution of problems of national concern.
- The application and use of engineering and the natural sciences to assist industry in Canada with the development of new and improved processes, methods, products, systems, techniques and services.
- To develop and maintain standards and criteria based on the natural sciences and engineering.

12.4 The objective of the Scientific and Technical Information Program, as stated in the Estimates, is "to facilitate the use of scientific and technical information by the government and people of Canada." This objective is supported by three sub-objectives:

- To provide and maintain services associated with scientific and technical information to meet the needs of the government and people of Canada.
- To conduct research into the need for and methods of accomplishing the transfer of scientific and technical information in response to user needs.

- To participate in the overall provision of library and information services for the government and people of Canada.

Resources

12.5 During 1980-81, Parliament allocated approximately \$246 million and 3,125 person-years to NRC. As indicated in Exhibit 12.1, most of the funds were devoted to the Research Program. Figures in the exhibit are drawn from both the Main and Supplementary Estimates.

Organization

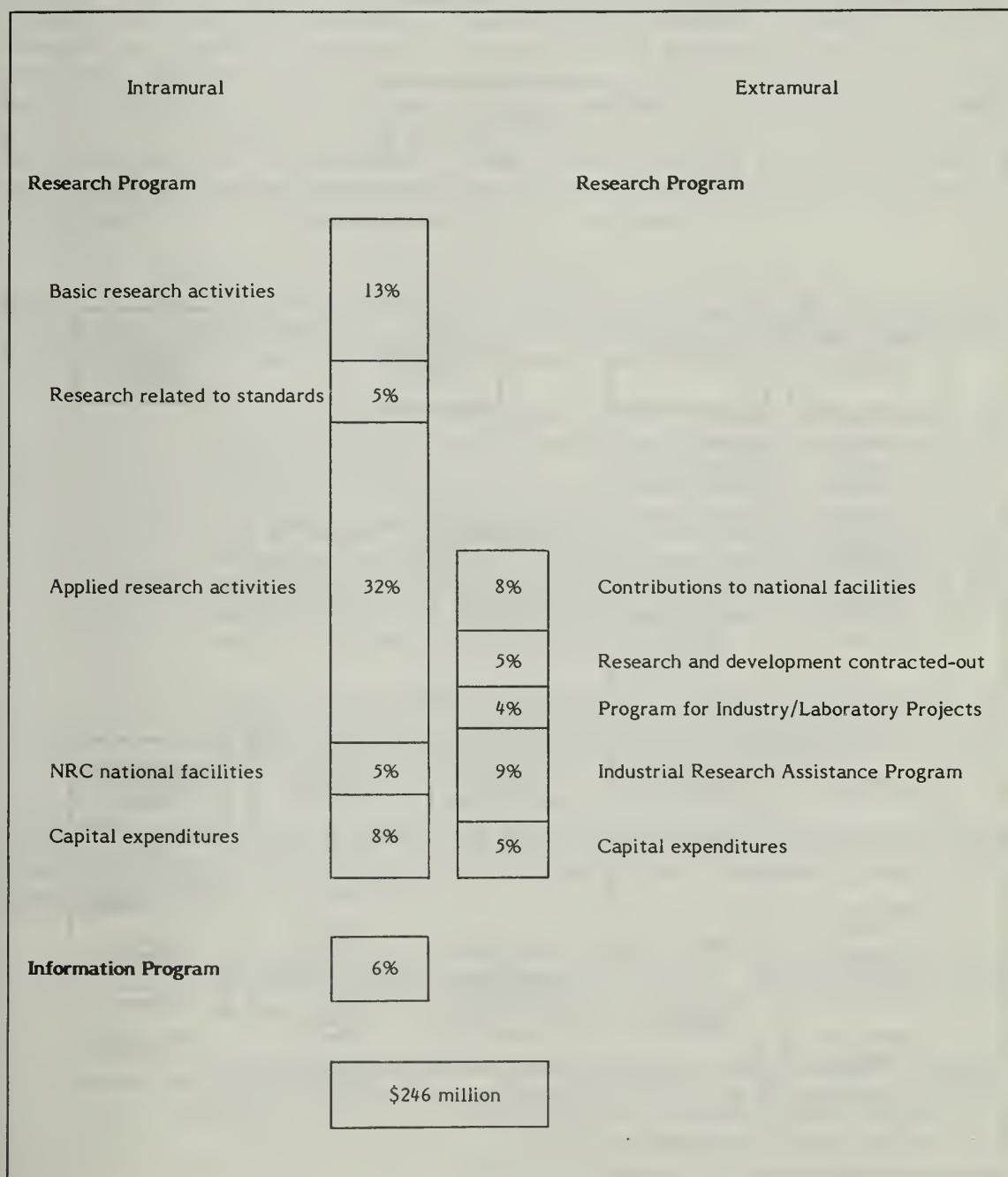
12.6 To meet its program objectives as set out in the Estimates and to reflect its status as a Schedule B Crown corporation, NRC has two organizational dimensions. The first includes the organization of the programs for which NRC is accountable. The second is made up of a governing Council and a set of committees that provide policy guidance and overall supervision and direction to NRC's programs. Exhibit 12.2 shows a summary organization chart of NRC.

12.7 Programs. In its Research Program, NRC operates eight Ottawa-based laboratory divisions and three regional laboratories in addition to a number of national research and test facilities. Research staff is normally organized in divisions based on scientific discipline or by area of application. For example, the Division of Chemistry and the Hertzberg Institute of Astrophysics are discipline divisions; building research is an area of application. Divisions are headed by Division Directors who delegate project management responsibilities to Section Heads within their Divisions. Division Directors report to the Senior Vice-President, Finance and Operations. The Divisions are arranged in three groups, and a Director in each group is designated as the Group Director for purposes of planning and co-ordination.

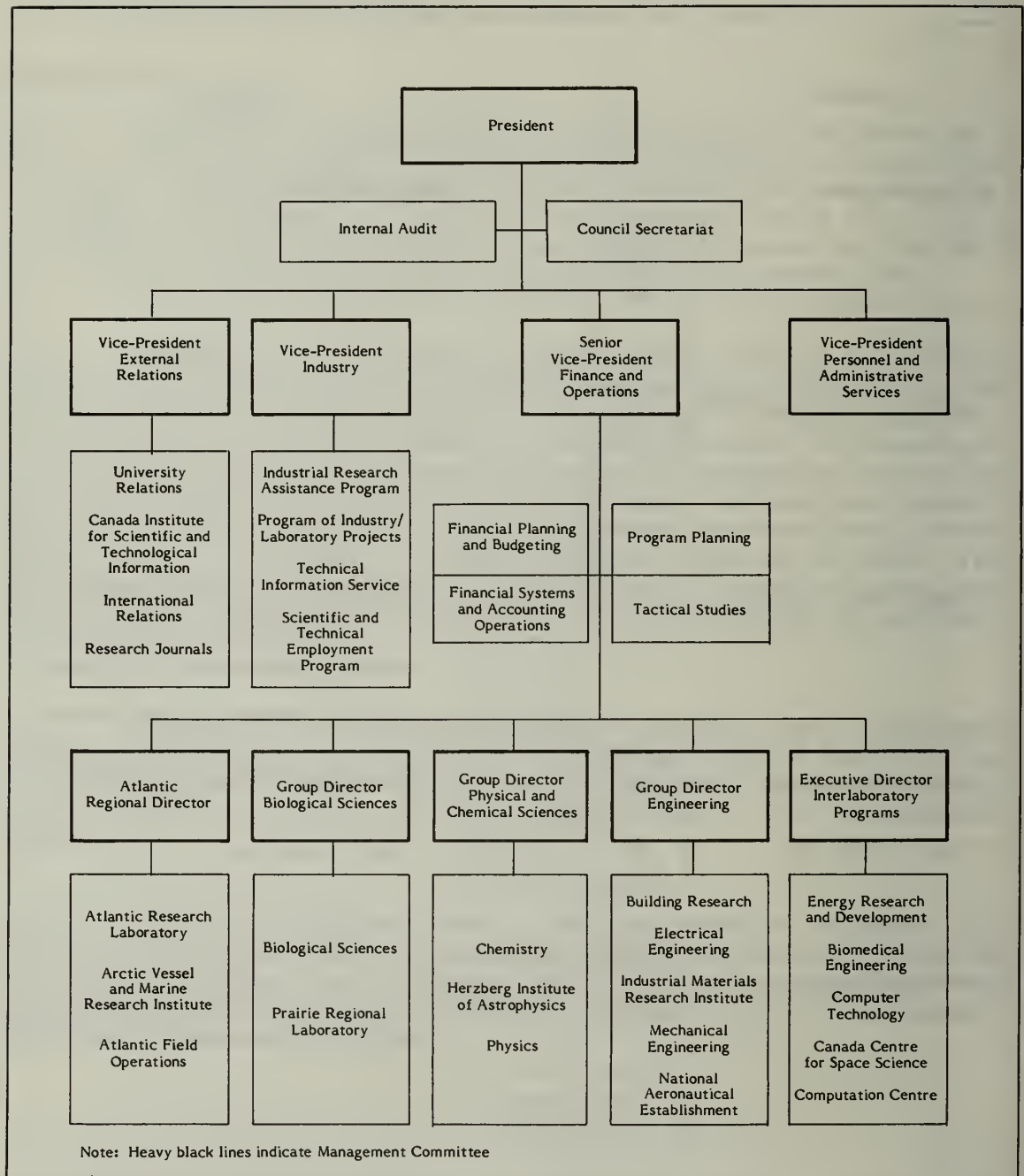
12.8 As part of NRC's responsibilities for technology transfer and industrial assistance, the Program for Industry/Laboratory Projects (PILP), the Science and Engineering Student Program (SESP) and the Industrial Research Assistance Program (IRAP) are carried out under the direction of the Vice-President, Industry.

12.9 NRC also operates three major interlaboratory programs, each directed by a Program Manager who manages research activities or projects that cut across disciplinary and application areas. NRC's energy program is an example of this kind of activity. Program Managers report to the Executive Director, Interlaboratory Programs.

NATIONAL RESEARCH COUNCIL OF CANADA
ALLOCATION OF 1980-81 FUNDS APPROPRIATED BY PARLIAMENT



NATIONAL RESEARCH COUNCIL OF CANADA
SUMMARY ORGANIZATION CHART - 31 MARCH 1981



12.10 The Scientific and Technical Information Program was established in 1974, and its Director reports to the Vice-President, External Relations. The Canada Institute for Scientific and Technical Information (CISTI) is the major activity of this program. CISTI is involved in collecting, storing and disseminating scientific and technical information to universities, industry and other users. Another activity of this program is the publication of the Canadian Journals of Research.

12.11 The Council and Committees. The governing Council, composed of a President and up to 21 members, is appointed by Governor in Council. Council members are chosen from industry, universities and government departments and agencies. Members serve on a part-time basis. At 31 March 1981, the Council had 19 members, 10 from industry, 6 from universities and 3 from the public service. The President of NRC serves a term not to exceed five years; however, he is eligible for reappointment. The Council, chaired by the President, is responsible for general policy direction only. Day-to-day control is provided by management.

12.12 The governing Council is assisted in its work by a number of Committees. Membership on three of the Committees is drawn from NRC's senior management and from representatives of various laboratories:

- The Management Committee is NRC's senior management committee, carrying out or arranging for strategic planning and setting priorities.
- The Program Selection Committee is responsible for examining and selecting proposals for programs or projects requiring new resource commitments. The selected program or project then becomes part of NRC's operational plan and is included in resource requests to central agencies.
- The Tactical Studies Committee provides a management and communication link between the laboratories and senior management regarding priorities and resource allocation.

12.13 There are also several ad hoc, advisory and associate committees made up of experts in science and engineering from university, industry and government:

- Ad Hoc Review Committees review and evaluate specific parts of NRC research and service activities. They are chaired by either current or former Council Members.
- Advisory Committees advise on specific NRC research programs and projects and report either to Council or to particular division heads.

- Associate Committees are formed to address national needs and priorities, consider specific problems, provide a neutral forum where there is a shared federal/provincial interest or to act as a Canadian liaison for membership in international scientific organizations.

Environment

12.14 Several factors and relationships influence the operating environment of NRC. NRC is the only national agency in Canada devoted solely to scientific research and engineering. In addition to meeting the requirements of central agencies of government, NRC handles demands from other government departments, provincial research organizations, industry and the university community.

12.15 Historically, management of research and development activities has been characterized by a degree of informality and individual and group research autonomy. This is based on the concept that, in areas of pure and applied research, bureaucratic processes should not interfere with scientific creativity. Undue interference, some research organizations have maintained, can hamper the motivation and morale of staff, thus jeopardizing creative activity.

12.16 As with other areas of high technology and science, knowledge, creativity and skill are essential to progress at NRC. All research organizations must be capable of adapting to the availability of special technical resources, and often flexibility is limited by a lack of personnel with required research skills and expertise. In addition, the specialized nature of the human resources required means that it is important to plan carefully for future initiatives; the disciplinary skills of scientists and engineers are not easily transferred to other areas.

12.17 Over 30 different disciplinary and application areas and laboratories operate within NRC. These range from theoretical and basic research in areas like spectroscopy to applied research concerning applications of standards in fields such as building research. Thus, the types of work vary considerably, with management needs in areas such as information and control varying as well. Further, research and development activities are often characterized by long time delays between the initial investment of resources and the achievement of expected returns. This time lag can be for months or decades, depending on the nature of the work and the resources devoted to it. Therefore, it is not possible to manage all research work in the same way.

Audit Scope

12.18 We concentrated our audit effort on the systems in place to manage the resources devoted to achieving NRC's objectives and the ways in which NRC accounted for the use of these resources both internally and to Parliament. We did not assess the technical or quality aspects of the research under way at NRC.

12.19 To determine whether NRC has demonstrated due regard for economy and efficiency in the acquisition and use of its resources and has satisfactory procedures in place to measure the effectiveness of its programs, we assessed the systems and processes for strategic planning, operational planning and project management, and review and evaluation. In addition, we examined relevant support functions including financial management, management of materiel and capital projects, and internal audit.

12.20 Because the major initiatives of NRC are directed toward industrial support and development, most of our audit work was devoted to programs and projects related to this area.

Summary of Audit Observations

12.21 For almost 50 years, NRC has been deeply involved in pure and applied scientific research and engineering. It has made substantial contributions of knowledge to government, industry and universities in Canada and around the world. The Defence Research Board, Atomic Energy of Canada Ltd., the Medical Research Council, the Natural Sciences and Engineering Research Council and many others have grown out of NRC programs. NRC has fostered the development of numerous provincial research organizations through financial support and/or sharing of knowledge.

12.22 Our review of the Information Program and capital projects, which comprise approximately 19 per cent of the resources allocated to NRC, indicated that, in these areas, satisfactory systems and procedures were generally in place.

12.23 Through its Ad Hoc Review Committee process, NRC has taken reasonable steps to determine the scientific quality and relevance to objectives of its research efforts. The focus of our audit in the research program was not on the quality of the research effort at NRC but rather on the management systems and procedures.

12.24 **Basic research.** Our audit disclosed that NRC's management systems as applied to areas devoted exclusively to pure research, which makes up about 26 per cent of NRC's expenditures, were generally adequate for ensuring that due regard was paid to economy and efficiency of operations. As well, in many cases, program effectiveness in these areas was being measured, based on peer review of individual research efforts.

12.25 **Applied research.** NRC's role and the emphasis of its programs have shifted in recent years. Since 1974, NRC's Council has given priority to policies and programs for advancing and assisting industrial research and development in Canada. In 1979, NRC began a long-range planning exercise in which objectives were revised and themes or priority areas were identified. This plan, called *The Urgent Investment*, has received approval in principle from the Government.

12.26 Given this reorientation toward industrial development, we concluded that, even though NRC has been initiating a number of changes in its management systems, there were still several significant deficiencies in these systems as they relate to applied research, which accounts for approximately 37 per cent of NRC's resources.

12.27 First, long-range plans were not sufficiently specific in support of NRC's objectives to provide adequate guidance to its operational planning efforts so as to ensure that appropriate programs would be developed, projects selected, and achievement measured.

12.28 Second, there was a lack of a formal planning process to link NRC's objectives and the actual laboratory programs and projects being carried out, except with respect to projects requiring new resources. In addition, the information and data from outside sources, such as industry, were generally inadequate for ensuring that research programs and projects, which have as their objectives assistance to industry, were likely the most effective.

12.29 Third, the laboratory projects proposal, planning and approval processes were not adequately documented, and there was a general lack of documented, systematic monitoring of continuing programs and projects. Those procedures in program planning, selection and approval that did exist were directed primarily toward initiatives requiring new or additional resources.

12.30 Fourth, satisfactory procedures were not in place across NRC to measure the effectiveness of its applied research programs.

12.31 Financial function. Staff of the Financial Services Branch were not appropriately involved in the financial aspects of program planning or in the development of information systems that had financial implications. In addition, there was a need to improve the financial information available to managers for planning, controlling and evaluating the activities for which they were responsible, including revenue-earning operations.

Observations and Recommendations

Strategic Planning

12.32 Strategic planning for research and development activities involves an assessment of long-term technological, industrial and economic trends and the possibility of scientific breakthrough. These trends, scientific and technological possibilities and the availability of financial and human resources are taken into account by the research organization in establishing its objectives. Objectives must then be translated into operational terms so that management can select those programs and projects that are most likely to achieve its objectives.

12.33 Because a decision to embark on a new program or project can have important resource implications for years to come, an important point in the planning process is the selection of research programs or projects. It is essential that the selection of programs or projects is consistent with objectives and that expenditures are justified. This usually means that the process must be reasonably formal, rigorous and comprehensive for large organizations such as NRC.

12.34 We examined the strategic planning process at both the corporate and divisional levels of NRC. We looked at five aspects of strategic planning -- stating objectives, the planning process, technology transfer, identification of long-term trends, and identification of industry needs.

12.35 Stating objectives. We found that NRC's objectives had not been translated into operational terms, and priorities had not been defined. For example, one of NRC's major objectives stated in the Estimates is "the application and use of engineering and the natural sciences to assist industry in Canada with the development of new and improved processes, methods, products, systems, techniques and services". Because of the limited research resources within NRC and given the broad spectrum of Canadian industry, we would expect to find a documented set of specific industrial priorities. Our premise is that the benefits to be derived from assisting Canadian industry vary with the choice of these priorities.

12.36 Support for the need for such focusing can be found in the Electrical Engineering Division. The 1980 Ad Hoc Review Committee for one section of this Division commented that there was a need for stronger, central direction, that is, a unified policy and defined goals; program development was in response to specific requests and available expertise; objectives could have been made clearer and more specific. This was done in the Solar Energy Program, where a planning framework had been developed for use in project and program selection.

12.37 If objectives are not adequately clarified, either through stating them more specifically or through a process of translating them into operational terms, relevant goals or targets cannot be set, and thus it is difficult to monitor research activities and evaluate programs and projects. Because NRC management had not defined its objectives in operational and specific terms, it could not hold research groups accountable for achieving objectives. This also made it more difficult for Parliament to hold NRC accountable for achieving objectives.

12.38 *NRC should translate its objectives into operational terms to guide its planning efforts and to provide for subsequent assessment of performance.*

12.39 Planning process. There was no mechanism for co-ordinating and reviewing strategic planning efforts across Divisions, except for initiatives requiring new or additional resources. There were few procedures to assist

Divisions to improve their planning processes and methodologies, to undertake broad strategic studies on behalf of NRC, or to monitor progress against the long-range plan and inform senior management of progress.

12.40 *NRC should ensure that procedures are put in place to co-ordinate strategic planning efforts and to assist Divisions to improve methodology for planning.*

12.41 **Technology transfer.** Although NRC had a number of mechanisms for transferring technology to industry, such as direct negotiation with industry by laboratories, internal or external contacts, joint research and the Program for Industry/Laboratory Projects, we found no comprehensive, documented approach for achieving this technology transfer objective.

12.42 Several of NRC's Ad Hoc Review Committees found that attempts at technology transfer had been poorly co-ordinated and based on misconceptions concerning how such transfers should be achieved. Committee reports cited instances where companies had been selected as recipients for this type of transfer, even though the companies were not commercially viable and therefore were not likely to be able to use the technology.

12.43 *NRC should develop a comprehensive approach for technology transfer as part of the strategic planning process.*

12.44 **Identification of long-term trends.** We observed that there were deficiencies in the amount, quality and completeness of information gathered from both inside and outside NRC to be used as input to the strategic planning process.

12.45 It would be reasonable to expect that, as part of the strategic planning process, a formal assessment of the external environment would be done. This assessment would include long-term technological and scientific trends, changes in the economic and political environment, and the long-range prospects and needs of industry. Although formal long-range needs assessment and market studies had been completed in some Divisions, others based their long-term plans on informal, internal discussions. There was in general, a lack of data supporting formal long-range analyses of future requirements for research and little attempt to assess long-term potential economic or social benefits of undertaking research programs. Research managers were generally aware of changing trends in technology; however, there was no one at NRC responsible for co-ordinating "external" information or for analysing and projecting trends that could have a significant effect on ongoing research efforts.

12.46 The implication of this situation is that planning could be based primarily on short-term considerations without proper recognition of long-term needs and trends. This, in turn, could mean that resources would not flow to those areas that would be of the greatest benefit to Canada.

12.47 *NRC should ensure that analyses of environmental trends and related research needs are conducted by each Division, as appropriate, or by NRC as a whole, and that the results of these analyses are integrated to provide a basis for developing its operating strategies.*

12.48 **Identification of industry needs.** A specific major problem area is the identification of industry needs. The Industrial Materials Research Institute in Montreal has undertaken a number of technical-economic studies for materials research. The Laser Chemistry Group and the Solar Energy and Computer Technology Research Programs have initiated long-range needs assessment studies. Generally, however, NRC had no formal procedures for assessing long-range industrial research support requirements.

12.49 Many Divisions informed us that they kept in touch with research requirements in industry through informal contacts, seminars, publications, and by visits to industrial research laboratories. While this is a necessary part of maintaining an awareness of industrial needs and technological trends, there is also a need for a systematic assessment of industrial research support requirements. The lack of such an assessment meant that little guidance had been provided to managers who are responsible for establishing criteria for selecting projects to assist industry at the laboratory level.

12.50 Nine out of 17 Ad Hoc Reviews indicated that the assessment of long-term industrial needs for research was inadequate. This weakness should be a matter of major concern to NRC, since one of the critical elements of a strategic planning process is the identification of long-range client or market needs. There must be a means of ensuring that this takes place and is subject to continuing review and re-assessment. Without such a process to assess client needs, there is a risk that substantial sums of money could be spent with insufficient justification in terms of industrial support, economic benefit or prospects of transfer to industry.

12.51 *NRC's Divisions should undertake further analyses of the needs of industry for research support.*

Operational Planning and Project Management

12.52 An operational planning process in a research organization normally consists of selecting programs and projects and then preparing detailed plans for them. Each plan should describe specific objectives and targets and key budget

and resource requirements for the coming period. It is generally accepted that there should be flexibility to allow operational plans to reflect new discoveries, opportunities or developments.

12.53 Project management is a process concerned with setting specific objectives, targets and milestones, monitoring progress and making decisions about the allocation or reallocation of resources for individual projects. It focuses specifically on control and direction of research projects by individual units within an organization.

12.54 At NRC, we would have expected to find that:

- divisions and other appropriate organizational units had completed an operational plan annually, including details of goals and anticipated resource allocation for major programs and projects;
- each unit had appropriate procedures and guidelines in place for preparing project proposals, screening them, and documenting their progress and review;
- each division had a project management system in place, identifying for each program and project the resources required, the objectives and a documented plan for achieving these;
- specific clientele and their requirements were clearly identified; and
- provision had been made for monitoring and periodic review of project progress.

12.55 Our review indicated that, generally, there was a lack of adequate documentation of operational planning and project management procedures at NRC. There were, however, notable exceptions. For example, in cases we reviewed, where specific projects or tasks were contracted-out, Treasury Board guidelines were followed, and project or task identification and review was well documented. In instances where NRC had taken on a specific research project at the request of industry, there was reasonable identification and reporting of resources used. As well, NRC had initiated a pilot project management system in the Division of Mechanical Engineering.

12.56 Our audit indicated that NRC's systems and procedures were generally adequate for effectively planning and controlling the Industrial Research Assistance Program (IRAP) and the Science and Engineering Student Program (SESP). We found that the goals and objectives of each Program had been stated in terms specific enough to identify the companies toward which each Program was directed and to develop criteria for selecting the most appropriate proposals for funding. In general, we found the process for reviewing applications and selecting

proposals and for assistance was adequate for ensuring that approved applications met the selection guidelines and were consistent with the objectives of these two Programs. However, we found some instances of deficiencies in their administration.

12.57 The newer interlaboratory programs such as Computer Technology Research, Solar Energy Research and Development, and the Industrial Materials Research Institute (IMRI) were in various stages of implementing project or task management systems. For example, IMRI sets up a project dossier for each project undertaken. The dossier includes a project initiation sheet, a project justification report, quarterly progress reports, and a report when the project is completed. Many of the older Divisions, however, used their annual reports to describe ongoing programs and the resources devoted to each of them. Objectives and accomplishments were usually incorporated into the reports; however, our review of the annual reports indicated that they lacked detailed information on individual projects in terms of plans, objectives, and accomplishments with respect to plans.

12.58 Initial allocation of new resources to a program is screened, ranked in priority and co-ordinated by a Program Selection Committee and approved by the Management Committee and Council. The Program Selection Committee is a recent innovation at NRC; approval for new resources was formerly given by the Management Committee on the advice of the Tactical Studies Committee. Once the request for new funding is approved and the funds obtained through the Estimates, the program area and attendant resources become part of a Division's continuing program. It is then up to the Division, usually the Director, to approve new projects or tasks within each program area or to reallocate resources to other projects within his Division. Depending on the size of the project and the size of the Division, this process may be delegated to the Section Head. For example, in Divisions such as the National Aeronautical Establishment, Electrical Engineering, and Chemistry, the Section Head can usually decide to embark on small new projects that fall into the program area he supervises. Usually, however, the Director decides on major resource commitments, external contracts or shifts in resources between projects. Generally, ideas for projects originate with the scientists and are approved at the laboratory level.

12.59 In most of the Divisions, there was little documented identification of proposed projects, the rationale for their approval, the resources spent on the project, or what was being achieved. Divisional managers informed us that projects were managed through informal management systems and formal, but not always recorded, review meetings. Any dissemination of results was usually through research publications. Throughout this process, there was little systematic review of programs against goals or objectives set for them.

12.60 Although a project identification system was being implemented, at the time of our audit few divisional or senior managers had put in place procedures that would give them a comprehensive picture of all projects and

studies under way in a particular year, the resources to be expended on each, and the expected achievements or targets for each project. There was no mechanism to document progress reviews, report activity to senior management or to hold managers to account.

12.61 *NRC should develop procedures for the use of Divisions in identifying and reviewing both new initiatives and continuing programs. Procedures should provide for documentation of review results, including the continuing relevance of project objectives.*

12.62 *NRC should implement project management systems, including as a minimum:*

- *formal project justification and selection and review procedures;*
- *identification of project goals and milestones related to operational plans; and*
- *periodic progress reporting and review against milestones and goals.*

Review and Evaluation

12.63 In any organization, review and evaluation procedures provide information for taking corrective action where required and identifying the need for modifications to organizational objectives and plans.

12.64 In examining the review and evaluation procedures of NRC, we expected to find that:

- there was an evaluating plan in place, with procedures for evaluating periodically all projects and programs for which evaluation was reasonable in the circumstances;
- information about the results of program or project evaluation was being communicated to senior management; and
- recommendations arising from evaluations were being acted on appropriately and follow-up actions were being monitored.

12.65 Review and evaluation take place at several levels. NRC has conducted a pilot study for project evaluation which concluded that projects can be evaluated. In most Divisions, project reviews are undertaken to some extent through informal meetings. In some Divisions, however, there are more formal approaches to project reviews, especially for contracted-out projects. For these, documented progress reports and reviews are usually required.

12.66 We found that a second system of project review was based on elements of personnel appraisal systems. Scientists generally rely on peer group recognition in their chosen field; therefore, appraisal procedures in the basic research areas are heavily slanted toward assessing numbers of publications, citations, and other measures of stature in the scientific community. The orientation of this type of appraisal is toward the technical and scientific performance of the individual. This approach is consistent with procedures followed by other basic research institutes.

12.67 A third level of evaluation occurs through the Ad Hoc Review Committees. Reviews are conducted periodically by a selected group of outside experts in particular fields. The mandate of these reviews is broad and includes a review of activities of selected sections in relation to NRC objectives and the quality, effectiveness and future direction of research activities.

12.68 A fourth level consists of the program effectiveness evaluations of the Industrial Research Assistance Program, the Science and Engineering Student Program, the Program for Industry/Laboratory Projects and the Technical Information Service.

12.69 **Basic research.** Our findings indicated that, although the National Research Council used the second method -- evaluating the scientific efforts of personnel involved in basic research -- evaluations were a by-product of the Council's promotion system. Under this system, formal appraisals were only produced for personnel being considered for advancement.

12.70 Although NRC used measurement criteria accepted by the international scientific community in evaluating scientific personnel and their activities, there were no explicit procedures for evaluating the activities of research teams involved in basic research, except in cases of above average performance.

12.71 *NRC should ensure that, where feasible, all basic research team activities are evaluated on a formal and regular basis.*

12.72 **Applied research.** NRC has attempted to assess the economic benefits resulting from the Industrial Research Assistance Program and the Science and Engineering Student Program. The evaluation results were reported in *The Urgent Investment*. Our review of the methodology used in these evaluations revealed a number of deficiencies.

12.73 NRC had developed certain indicators of economic benefits for use in its IRAP evaluation; however, in our opinion, these indicators were deficient as measures of benefits. One of the indicators was the ratio of the dollar value of companies' sales, derived from projects partially funded by IRAP, to IRAP costs.

The use of this indicator was not appropriate because it took into account only IRAP costs and not costs to companies involved in IRAP projects that might have exceeded IRAP costs. The indicator did not take into account certain factors in addition to IRAP that might influence sales. That is, sales could be affected by the company's own marketing efforts, competitors' activities, customer reaction and general economic conditions. Given the deficiencies in this indicator, the benefits flowing from IRAP may have been overstated.

12.74 Our audit also revealed deficiencies in the information included in the annual report on SESP. The statement of financial benefits resulting from SESP projects of three to four-month duration was often based on companies' unverified projections of increased sales, gross profit and reduced operating costs over a five-year period. In addition, we found inconsistencies in the methods used to calculate financial benefits resulting from SESP projects.

12.75 Except for the specific program evaluations mentioned previously, we found that none of the Divisions had developed formal procedures for evaluating the impact of the results of individual applied research projects or programs. There was no evidence to indicate that post-project or program reviews were carried out. These reviews are particularly important for projects or programs of an applied nature in order to assess whether short and long-term objectives set out for the project or program have been met.

12.76 *NRC should ensure that, where it is feasible and cost-effective, applied research projects and programs are periodically evaluated in terms of continuing relevance and results achieved. In carrying out evaluations, appropriate and cost-effective methodologies should be used.*

12.77 **Reporting.** There was little evidence to indicate that information about Division activities, progress toward objectives, and results achieved was summarized and communicated to senior levels of management to provide an indication of progress or objectives achievement. We were told that some information is communicated informally to senior management, but that there was no means to ensure that this was done regularly. Where information was formally communicated through annual reports produced by selected Divisions, it provided only a project-by-project review of technical progress, lists of publications, patents and meetings attended. Except for Ad Hoc Reviews, there were few plans for reviewing projects and programs periodically or for communicating results to management.

12.78 At the time of our audit, there was no designated group responsible for evaluating NRC's programs. Without designated responsibility of this kind within the organization, NRC can have no assurance that cyclical evaluations related to achieving objectives will take place. NRC has proposed the establishment of a program services secretariat that would include this evaluation function.

12.79 *NRC should establish procedures to co-ordinate, plan, and monitor evaluation efforts and ensure that all results are reviewed by senior management.*

12.80 **Ad Hoc Committee Reviews.** External Ad Hoc Committee Reviews are a positive initiative; however, we observed inconsistencies in the approaches used by various Committees. For example, some focused on projects; others on general management procedures. NRC has recognized that the Committees do not always provide a rigorous review of achievement of objectives.

12.81 *NRC should examine the procedures for Ad Hoc Committee Reviews and establish criteria to ensure consistency and adequacy in coverage and approach.*

Information Program

12.82 The Canada Institute for Scientific and Technical Information (CISTI) accounts for approximately 84 per cent of the resources allocated to the information program, or approximately \$9.8 million.

12.83 Our review indicated that the management systems and procedures in place were generally satisfactory. Management had, at the time of our audit, initiated a study to identify user needs and their relation to CISTI.

Support Services

12.84 **Financial function.** Since our 1977 review, NRC has strengthened the organizational status of the financial function. The Senior Vice-President has been designated as Senior Financial Officer, and senior staff have been added to operational financial control areas. The Senior Vice-President, however, continues to carry responsibility for laboratory operations and many Council-wide planning and other responsibilities.

12.85 The Financial Services Branch provides a central service to the decentralized NRC organization. Divisional administrative officers provide for financial needs in Divisions and are thus relied on to identify problems and opportunities for improvement. These officers take functional and program direction from the Senior Vice-President and functional direction from Financial Services.

12.86 The responsibilities of senior financial staff were limited to operational systems and controls and preparation of budgetary reports for central agencies. The Financial Services Branch did not participate directly in the financial aspects of program planning and was not always consulted in the development of information systems that had financial implications.

12.87 We found that functional guidance in operational processing controls and in matters related to financial policies was satisfactory. NRC has recently strengthened these areas, and financial staff plan further improvements.

12.88 *NRC should clarify the mandate of the financial function to include involvement in the relevant aspects of management decision making, including planning and evaluation, and responsibility for reviewing the financial control aspects of all management information systems.*

12.89 **Financial information.** Managers require information on progress against plans, both for resources applied and results or outputs generated, on which to base decisions on corrective action needed. Information for controlling annual appropriations is also required. At NRC, the FINCON system (an on-line commitment control and financial reporting system) provided adequate information for appropriation control and some additional statistical information.

12.90 Managers also need to have information, in a form related to their operations, that shows costs and revenues compared to budget. Analysis of variances would also normally be expected to show the reasons for deviations from budget and identification of possible savings or overspending. A few Divisions have developed their own systems to give project-oriented information of this nature; however, there was little systematic accumulation and reporting of financial information related to project results and expenditures. NRC recognizes the need for such information and, to address it, has been developing a project information system over the past two years.

12.91 Although it is accepted that the information systems of individual Divisions may be different, it is necessary that the results can be aggregated for senior management and others. Except for appropriation control, there was no overall plan to ensure that management received adequate information on which to base decisions.

12.92 *NRC should develop a plan to meet managers' needs for financial information for planning, monitoring, control and evaluation. The plan should ensure that:*

- *financial information for planning and evaluating activities is related to the information used for monitoring and controlling operations and is reported to senior management; and*
- *information on the results of activities identifies costs and revenues compared to budget and includes analyses of variances, where appropriate.*

12.93 Revenue generation. In 1980-81, NRC earned approximately \$9 million in revenue from a variety of services and activities, including use of wind tunnels, test services and publications. In recent years, NRC has significantly increased the rates for many of its services, and several new services and facilities are expected to be major sources of revenue.

12.94 We found that internal control over the billing and collection functions was adequate. However, rate-setting policies did not provide sufficient guidance to laboratory and program managers who make most of the decisions with respect to revenue. Regular reports were not provided to management setting out the effect of rates which do not recover the cost of the services concerned or of discounts given to certain customers.

12.95 Central management reviewed rate revisions for some cost-based services; however, rates were inconsistently calculated. For example, in the National Aeronautical Establishment wind tunnels, the rates did not recover capital costs from Canadian users although they did from foreign users. Based on current levels of usage, the recovery of these costs in the 30 foot wind tunnel alone would raise about \$170,000 more revenue annually.

12.96 NRC procedures do not require managers to advise central management routinely when they provide new types of services without charge to outsiders even in situations where a charge might reasonably be made and the amount involved is sufficient to warrant making a charge. In the changing environment of NRC, it is possible that potential sources of revenue may be overlooked.

12.97 Financial information regarding revenue-producing services was limited to recording annual budgets and actual charges. Information to indicate maximum potential revenue, the extent to which the capacity of revenue-producing facilities was being used, the effect of discounts, and other information on the management of revenue was not systematically gathered and communicated. As a result, management did not know whether maximum allowable revenue was being collected.

12.98 *NRC should make guidelines for rate setting more specific to ensure that line managers consider all relevant costs in setting rates.*

12.99 *Financial information systems should display to management the results of revenue-earning operations. In particular, the extent to which the capacity of revenue-producing facilities is being used and the effect of discounted or no-charge services should be displayed.*

12.100 *NRC should review periodically all activities and facilities providing services to parties outside the government to ensure that its revenue policies are being uniformly applied.*

12.101 Materiel management. Since 1978, NRC has had a Central Inventory Control Office and now has a computerized inventory record system. This system produces an inventory of all NRC capital equipment. Although we noted some errors in information provided, generally it appeared to meet management's needs for inventory information and control.

12.102 Capital projects. As indicated in Exhibit 12.1, approved capital expenditures for 1980-81 amounted to approximately \$31 million, or 13 per cent of NRC's estimates. We reviewed the planning and acquisition phases of two capital projects -- the Remote Manipulator System and the Fire Research Station. Both of these projects were nearing completion at the time of our audit.

12.103 Although there were no documented internal project management guidelines, our findings indicated that the management systems and procedures for those two projects were satisfactory.

12.104 Internal audit. Since its inception in June 1979, the internal audit group has completed five projects and has established its mandate and plans for audit coverage. Most of these projects were carried out in late 1980 and early 1981 and annual audit plans were reviewed and found satisfactory by the Office of the Comptroller General in 1980 and 1981.

12.105 The Chief of Internal Audit reports to the President of NRC; however, the internal audit group has had only general contact with the President and the Audit Committee. The group expects that the President will review and clear important audit reports in future.

12.106 Recent internal audit reports have addressed financial compliance and procedures to measure effectiveness; however, it is too early for us to assess whether internal audit can be used as a comprehensive management control by senior management and the Council. Because internal audit results were not available at the time of planning our audit, we were unable to rely on them in determining our audit scope.

Information for Parliament

12.107 The Office of the Comptroller General is continuing its work to revise the Estimates and Public Accounts. In this Chapter, we have noted that NRC needs to develop and provide its senior managers with more specific information about objectives, project goals and milestones, and related expenditures. These improvements would also enable NRC to provide information to Parliament in the Estimates and thus set the stage for accountability in the Public Accounts. To assist in the process of revising these documents, we have identified some key features which should be described in NRC's Estimates to help Members of Parliament better understand requests for resources, the allocation of resources,

and accomplishments from the use of resources. Our examples relate only to the Research Program.

12.108 Planning priorities for the 1980s. NRC's long-range plan, *The Urgent Investment*, describes six major "themes" and strategies for achieving them. One theme, for example, is to stimulate the gross domestic product of the technology intensive industrial sector of the economy from \$20 billion to \$40 billion by 1990, and to achieve specific employment and balance of payments benefits. Disclosure of specific objectives and their desired long-term results would give users of the Estimates a basis for assessing the direction of the program and for questioning specific milestones and resources requested. More work needs to be done in specifying objectives and milestones before these can be included in the Estimates.

12.109 Results and outputs of applied research. Given NRC's primary emphasis on research in direct support of industrial innovation and development, the Estimates should identify, where appropriate and reasonable, the expected results of applied research. This would help parliamentarians assess the value of these results in relation to the funds requested.

12.110 Results and outputs of basic and exploratory research. Although it is extremely difficult to identify results and outputs for the area of application that NRC calls "advancement of knowledge", this type of research should, nevertheless, be dealt with in more detail in the Estimates because it consumes a sizeable share of program expenditures. Where intended results and outputs cannot be stated precisely, the Estimates should describe the work in progress and classify basic and exploratory research projects or programs by expected life span.

12.111 Personnel. NRC research staff are a highly specialized and valuable resource as well as the most critical ingredient in achieving the organization's objectives. In fact, the skills and interests of personnel partly determine the choice of basic research projects many years into the future.

12.112 Personnel and associated costs are NRC's largest single expenditure item. Information from the current "Blue Book" concerning the number of scientific, professional and technical personnel should be expanded into a profile of the types of staff, their levels and average salaries, and the degree of disciplinary specialization throughout NRC. An explanation of the professional staff development and training expenditures might also be related to the staff profile.

12.113 Over the past few years, expenditures on research and development contracts and other special and professional services have increased until they now amount to almost two-fifths of budgeted payroll costs. An explanation should be provided in the Estimates of the rationale for and the types of work done by special and professional service contracts.

12.114 Grants and contributions. The Public Accounts Committee has requested more details in the Estimates on grants and contributions generally. This is especially appropriate for NRC because, after salaries and wages, contributions are the second largest item in its Estimates. Contributions toward research in industry should be classified by industry, types of business and location. If this information is not known when the Estimates are prepared, it should be provided in the Public Accounts. The objectives of major projects like the Tri-University Meson Facility (TRIUMF) should be explained, in addition to the expected effects and how these relate to the program objectives. The Estimates should also show the eligibility criteria for funding and the response time for processing applications for grants and contributions.

12.115 Major capital projects. NRC currently has several large capital projects. In addition to the information now shown, the Estimates should state the purpose of projects, distinguish new projects from those begun in prior years, show the estimated completion date and future requirements year by year, and explain changes from the estimated total cost for a given project in the previous year's Estimates.

12.116 Revenue. Although revenue is not a particularly large item in relation to total expenditures, there is a need to demonstrate to Parliament that a logical, consistent revenue policy is being followed. An explanation should, therefore, be provided of the services for which NRC does and does not charge and the basis of their rates or fees if a charge is made. Where practical, a comparison should also be shown of the costs and revenues of particular services.

Summary of Recommendations and NRC's Comments

Recommendations

NRC's Comments

Strategic Planning

- | | | |
|--------------|--|--|
| 12.38 | NRC should translate its objectives into operational terms to guide its planning efforts and to provide for subsequent assessment of performance. | The developing Project Management System addresses this in part. |
| 12.40 | NRC should ensure that procedures are put in place to coordinate strategic planning efforts and to assist Divisions to improve methodology for planning. | The formulation of the Five-Year Plan accelerated such procedures. To the Council, Management Committee and Board of Directors has been added the Planning Services Secretariat. |
| 12.43 | NRC should develop a comprehensive approach for technology transfer as part of the strategic planning process. | This has been recently accomplished in part by the integration of the PILP and university technology transfer programs into one NRC-based service. Where applicable, other comprehensive approaches will be documented. |
| 12.47 | NRC should ensure that analyses of environmental trends and related research needs are conducted by each Division, as appropriate, or by NRC as a whole, and that the results of these analyses are integrated to provide a basis for developing its operating strategies. | Environmental factors are now a major criterion for selection of projects in our long-range plan. Our network of advisory and associate committees assists us greatly with relevant inputs and forecasting. More emphasis will be placed on documenting liaison with industry sources and demonstrating relevance to clients' needs. |
| 12.51 | NRC's Divisions should undertake further analyses of the needs of industry for research support. | This is continuing. |

Recommendations

NRC's Comments

Operational Planning and Project Management

12.61 NRC should develop procedures for the use of Divisions in identifying and reviewing both new initiatives and continuing programs. Procedures should provide for documentation of review results, including the continuing relevance of project objectives.

Procedures exist for identifying and assigning priorities to new initiatives. The most recent exercise was the "Tournament of Champions" which is well documented. Continuing programs are systematically assessed internally and externally as well as by Council itself on a regular basis. The Project Management System and the annual Operational Plan are additional elements being implemented.

12.62 NRC should implement project management systems, including as a minimum:

- formal project justification and selection and review procedures;
- identification of project goals and milestones related to operational plans; and
- periodic progress reporting and review against milestones and goals.

A Project Management System, based on a 1980 pilot in five Divisions, and a detailed design development currently under way in one Division are expected to meet these requirements as well as provide inputs to planning, financial monitoring and technology transfer processes.

Such a project management system, however, used in its entirety, is inappropriate for fundamental research. Research whose results are foreseeable is very often poor research.

Review and Evaluation

12.71 NRC should ensure that, where feasible, all basic research team activities are evaluated on a formal and regular basis.

Our Basic Research activities, including team activities, will continue to be reviewed by the external Review Committees of Council and scientific peers in the international community on a regular basis.

Recommendations

NRC's Comments

12.76 NRC should ensure that, where it is feasible and cost-effective, applied research projects and programs are periodically evaluated in terms of continuing relevance and results achieved. In carrying out evaluations, appropriate and cost-effective methodologies should be used.

Agreed.

12.79 NRC should establish procedures to co-ordinate, plan, and monitor evaluation efforts and ensure that all results are reviewed by senior management.

Such procedures exist, but are being modified. The program of the Internal Audit has been established. Further, the co-ordination of our evaluation processes will be through the Program Services Secretariat which will be the contact point with the Office of the Comptroller General for this function.

12.81 NRC should examine the procedures for Ad Hoc Committee Reviews and establish criteria to ensure consistency and adequacy in coverage and approach.

This examination will be made as part of the NRC review of the "Guide on the Program Evaluation Function" as issued by the Treasury Board.

Support Services

12.88 NRC should clarify the mandate of the financial function to include involvement in the relevant aspects of management decision making, including planning and evaluation, and responsibility for reviewing the financial control aspects of all management information systems.

The mandate will be reviewed to ensure a relevant role in the provision of resource inputs and reviewing financial controls.

Recommendations

NRC's Comments

12.92 NRC should develop a plan to meet managers' needs for financial information for planning, monitoring, control and evaluation. The plan should ensure that:

- financial information for planning and evaluating activities is related to the information used for monitoring and controlling operations and is reported to senior management; and
- information on the results of activities identifies costs and revenues compared to budget and includes analyses of variances, where appropriate.

12.98 NRC should make guidelines for rate setting more specific to ensure that line managers consider all relevant costs in setting rates.

12.99 Financial information systems should display to management the results of revenue-earning operations. In particular, the extent to which the capacity of revenue-producing facilities is being used and the effect of discounted or no-charge services should be displayed.

Since the FINCON system has not been perceived as suitable for individual project control, the Project Management System is being designed to include financial information on a project basis and to be compatible with FINCON. Timely and meaningful financial data will be provided in an evaluation system to include budget/expenditure variances which will be communicated to Management.

A review of NRC's policy on cost recovery is under way. Currently, the fee structure allows for free service in research, recovery of operational costs from some clients and recovery of operational and capital costs from other clients. Individual cases are particular, requiring special arrangements.

Agreed.

Recommendations

NRC's Comments

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| 12.100 | NRC should review periodically all activities and facilities providing services to parties outside the government to ensure that its revenue policies are being uniformly applied. | Agreed. |
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POST OFFICE DEPARTMENT

POST OFFICE DEPARTMENT

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POST OFFICE DEPARTMENT

Introduction

13.1 We have conducted a comprehensive audit of the Post Office Department operating as a department of the Government of Canada under the Post Office Act, *R.S.C. 1970, c. P-14*. The Canada Post Corporation Act, *S.C. 1980-81, c. 54*, which received Royal Assent on 23 April 1981, established the Post Office as a Crown corporation. Its proclamation in force, effective 16 October 1981, repealed the Post Office Act.

13.2 This chapter contains the principal observations and recommendations arising from our audit. Our audit focus was primarily on key processes used by management to direct and control the operations of the Post Office. The survey undertaken in the Department by the Office of the Comptroller General on Improvement in Management Practices and Controls (IMPAC) covers many of the same areas. Management's progress in implementing the IMPAC Action Plan has been taken into consideration in formulating our observations and recommendations.

13.3 The observations and recommendations in this chapter are also applicable to the Post Office as a Crown corporation, and we believe that action in implementing corrective measures should be followed up by Parliament.

13.4 We appreciate the co-operation that was extended to us by the staff of the Department throughout our audit.

The Department

History and Objectives

13.5 The Post Office has existed as a government department since Confederation. The basic function of transmitting letters has changed very little since then. Operations have expanded to provide other services such as priority post, electronic mail (telepost) and philatelic issues. To cope with increased mail volumes for the traditional mail services, operations have been mechanized in the last decade.

13.6 The objective of the Department, as stated in the 1980-81 Estimates, is "to provide postal services to the people of Canada at rates which will provide a standard of service adequate to meet their needs without incurring subsidization from general taxation other than that required to cover losses specifically identified in relation to other government objectives".

13.7 The Post Office is similar to other government departments in that it provides a public service, but it has the characteristics of a commercial enterprise in that it charges the user for services provided. These characteristics have been recognized by Parliament in converting the Department into a Crown corporation.

Organization

13.8 Exhibit 13.1 sets out the plan of organization under which the Post Office operates. The Headquarters staff in the functional units -- Marketing, Operations, Corporate Affairs, Personnel, and Finance and Administration -- are headed by Assistant Deputy Postmasters General, who support the Deputy Postmaster General as chief operating officer. Headquarters' role is primarily long-range planning, development of strategies, policies and guidelines, and relations with central agencies. It also collects and processes corporate information to assist the Deputy Postmaster General in monitoring regional operations.

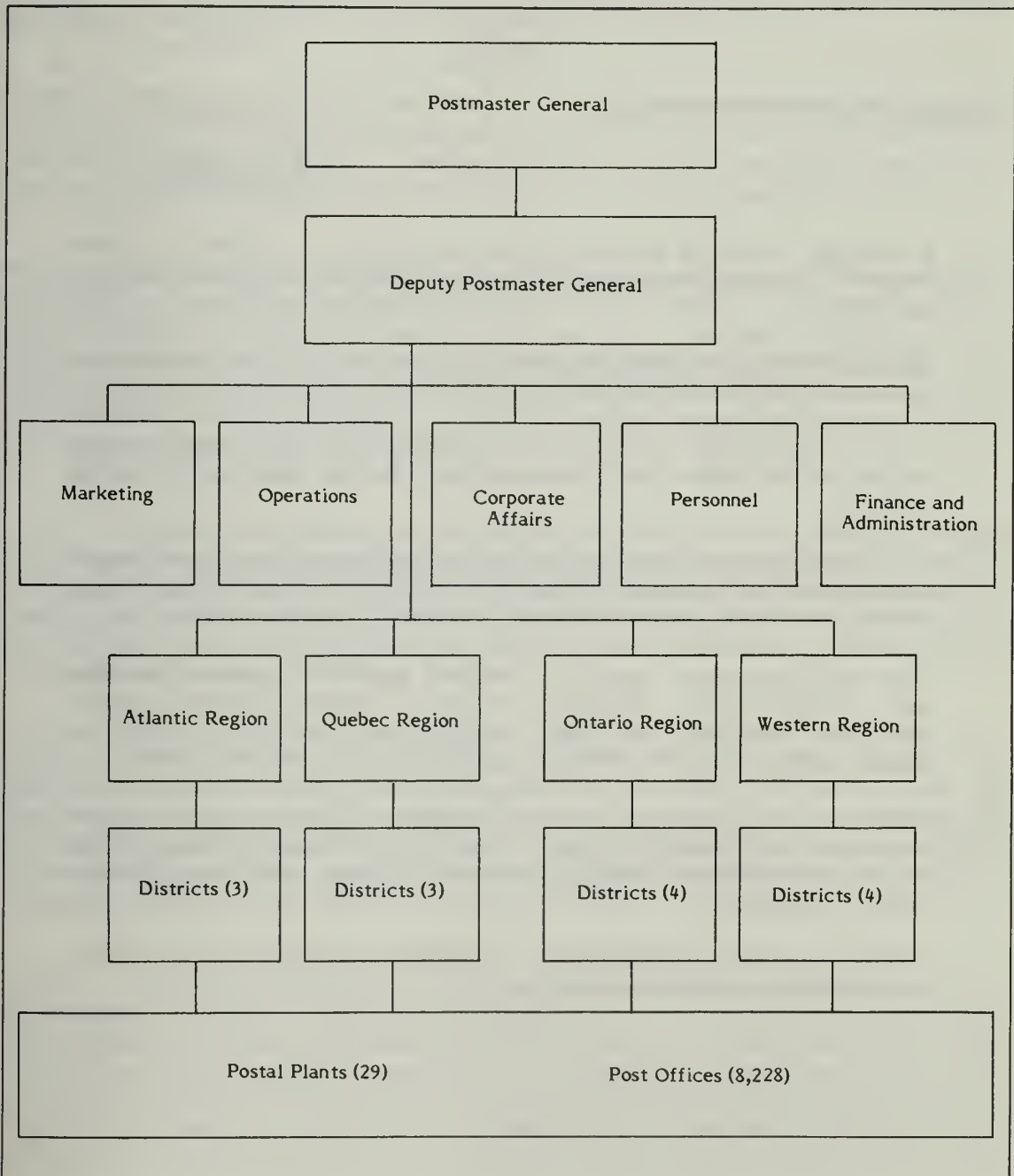
13.9 The Post Office has a decentralized organizational structure in that responsibility for postal service operations in the four regions has been delegated to Regional General Managers who report to the Deputy Postmaster General. Regional operations are further sub-divided into 14 districts, each headed by a Director reporting to a Regional General Manager. The Regional General Managers and some of the District Directors have support staff corresponding to the five functional units at headquarters. The District Directors are responsible for managing day-to-day postal operations at 29 postal plants and over 8,000 post offices.

Operating and Resource Highlights

13.10 The Post Office is one of the largest commercial operations in Canada. As stated in the Department's 1980 Annual Report, it delivered 6.4 billion pieces of mail during 1979-80, an average of 25 million pieces each working day. This involves a network of about 14,500 letter carrier routes serving over 6 million points of call, and more than 5,000 rural and suburban routes serving over 1 million households. In addition, the Post Office operates a fleet of 3,800 vehicles to collect and deliver mail as well as a large transportation network to move mail between major centres in Canada.

13.11 The net cost of the Post Office program, as presented in the 1980-81 Estimates, is \$412 million, based on costs of \$1.9 billion and postal revenues of \$1.5 billion. In addition to the postal revenues referred to above, the Post Office also operates a money order system which handles cash transactions of about \$2.5 billion annually. The authorized person-years and expenditures, by activity, and the activity description as contained in the Estimates are as follows:

POST OFFICE DEPARTMENT
SUMMARY ORGANIZATION CHART - 31 MARCH 1981



Post Office Department

	Person-years <u>authorized</u>	Budgetary <u>Expenditures</u> (thousands of dollars)
Marketing	6,845	\$ 211,429
Mail processing	25,054	612,244
Mail transportation	151	165,627
Mail collection and delivery	22,077	575,411
Technical operations support	1,727	67,674
Administration	<u>4,463</u>	<u>146,381</u>
	<u>60,317</u>	1,778,766
Services received without charge		<u>159,297</u>
		<u>\$ 1,938,063</u>

- *Marketing.* Includes sales at postal and philatelic counters, market research, product development, pricing, customer relations and sales promotion.
- *Mail processing.* Includes all manual and mechanical mail handling and processing within post offices.
- *Mail transportation.* Includes the movement of mail between post offices, either inter-city or international, by air, land, rail or water services.
- *Mail collection and delivery.* Includes gathering mail from street letter boxes and postal stations for processing in postal plants and delivery of mail to postal customers by various delivery modes.
- *Technical operations support.* Includes technical support functions such as engineering, operations research, systems research, quality assurance, computer services, management services, coding and mechanization, security services, operations policy and evaluation.
- *Administration.* Includes corporate-wide functions of a general management or administrative nature such as corporate planning, public affairs, international affairs, personnel, finance and administrative support functions.
- *Services received without charge.* Includes principally accommodation and employee medical benefits.

Environment

13.12 In providing a national postal service to over 23 million Canadians, the Post Office operates in an environment in which many demands, some of them conflicting, are placed upon it. Serving a population dispersed over a geographical area of about 3.8 million square miles requires a complex collection and distribution network. While the population is mainly concentrated close to Canada's southern border, it is also spread widely in rural, remote and isolated areas. Furthermore, demographic changes create pressures on the network, making it difficult to balance the needs of one area against another and at the same time maintain an adequate level of service nationally.

13.13 The Post Office provides a national postal service to individual Canadians and also to business and government. The latter two provide almost 75 per cent of postal revenues. The Post Office must be capable of meeting the needs of all postal users, although their needs may not necessarily be the same.

13.14 The objective of providing an adequate level of service to all Canadians places severe service demands on the Post Office. Its high visibility generates public and political pressures. Given that it handles 25 million pieces of mail each working day, even a small percentage of lost, delayed or damaged mail results in public complaints and adverse publicity. The same can be true if there is a proposal to make a change in the level or cost of a service, such as closing a post office or increasing postal rates.

13.15 Unlike most other government departments, the Post Office operates in a competitive environment where alternatives are available to users, especially commercial postal users. There are directly competing alternatives such as courier services and other alternatives such as telephone and telex. Changes in information flow technology, such as computer communication, are also having a competitive influence on the Post Office.

13.16 During the past decade, there has been a pronounced increase in the volume of business handled by those organizations in direct competition with the Department. Perceptions of unreliable service and threats of labour disruptions have led the public to use competitive services, particularly within and between major urban areas. To maintain its position, the Post Office must provide a competitive service and also keep pace with changes in technology.

13.17 Although operating in a competitive commercial environment requiring flexibility to adapt to change, as a Department of the federal government the Post Office's adaptability has been restricted by the regulations and requirements of other government departments and central agencies such as Treasury Board and the Public Service Commission in such areas as staffing, labour negotiations and planning. Growth in mail volume, the introduction of mechanization, changes in the working environment and the involvement of agencies outside the Post Office

have all contributed over the years to a deterioration in labour relations. The Government expects that conversion of the Department to a Crown corporation will help remedy this situation.

Audit Scope

13.18 Our audit was designed to assess whether there were key management processes in place to ensure economic, efficient and effective operation of the Post Office and adequate accountability reporting to Parliament. We examined first whether clear objectives had been established for the Department and whether management had reasonable procedures to measure and report on the achievement of those objectives. We next assessed whether appropriate procedures were in place to plan, direct and control the diverse activities of the Post Office.

13.19 On an operational level, we examined the adequacy of managerial controls over the major postal operations of sorting mail in postal plants, transporting mail between major urban centres, and delivering mail by letter carriers. We also tested the Post Office's system for measuring mail service reliability.

13.20 Because of the critical impact of labour relations on the success of the postal service, we reviewed Post Office programs for effecting improvements in employer-employee relations and management's preparation for collective bargaining. In addition, we examined the adequacy of procedures relating to human resource planning and training.

13.21 We also examined management controls over the key areas of electronic data processing, revenue protection and money order liability, and internal audit.

13.22 Finally, we assessed the adequacy of the Post Office's reporting to Parliament on the results of its operations and the achievement of its objectives.

13.23 Our audit included work at Headquarters and fieldwork in all regional offices and, on a selective basis, in district offices and other postal facilities.

Summary of Audit Observations

13.24 Managing such a large and complex organization as the Post Office, which is both labour-intensive and decentralized, requires effective management control processes. Although elements of adequate management control systems exist in the Department, there were deficiencies in key management processes that need corrective action to ensure that due regard for economy, efficiency and effectiveness is achieved. Department senior management was well aware of

most of the deficiencies and, through its IMPAC Action Plan and other corrective measures, had taken steps to remedy many of them. The following is a summary of our audit observations on each of our main areas of inquiry.

13.25 Program effectiveness. The objective of the Post Office is to provide an adequate standard of service without incurring subsidization other than that for losses specifically relating to other government objectives. The Post Office has identified a number of losses relating to other government objectives, such as publication mailings which are now subsidized, and is in the process of identifying further government objectives and their associated costs and revenues for which subsidization could be obtained. Until it has completed this process, the Post Office will not be in a position to measure and report on whether it has achieved its objective.

13.26 Reliability of service. The Post Office has defined adequacy of service in terms of speed, reliability and availability. The systems for measuring adequacy of service were not sufficiently accurate or sufficiently comprehensive to provide an effective means of evaluating the Post Office's total service performance. As an example, we tested the reliability of the principal system for measuring first class mail service delivery. Our test indicated that the Post Office system, if used for public reporting, would significantly overstate service performance for local mail delivery for the three cities tested by us. For first class mail forwarded between these cities, our test results were not significantly different from those of the Post Office's measurement system.

13.27 Corporate planning and control. Planning was carried out throughout the Post Office in a detailed fashion and within a clearly defined framework. However, the planning cycle lead time was too long, the business and financial planning phases were not sufficiently integrated, and there was not an adequate cost system for determining the financial implications of plans.

13.28 Inadequate cost information and weaknesses in the performance measurement system made it difficult for managers to decide on appropriate trade-offs between conflicting performance goals and also made it difficult to hold managers accountable for the results of these decisions.

13.29 Mail processing. There were weaknesses in the systems for planning and controlling the processing of mail in postal plants. The systems generally did not provide adequate cost information. Further, engineered work standards were not generally used for staffing and productivity improvement purposes.

13.30 National mail distribution. From a national perspective, we found that procedures were appropriately designed to meet the needs of a distribution system. The cost and efficiency of transporting mail between major cities were generally well controlled.

13.31 Letter carrier service. The Post Office has a system for assigning work to letter carriers and structuring their routes for an eight-hour work day. However, the Department's own studies suggest that the majority of letter carriers are able to accomplish their assigned work in less than the allocated time through various time-saving practices or by working at a pace faster than the standard. Although the letter carriers may not walk their routes exactly as designed, they are delivering the mail assigned to them each day. Having letter carriers walk their routes as structured would not improve efficiency or result in more mail being delivered.

13.32 We noted several potential areas for increasing economy and efficiency in the provision of letter carrier service. The Post Office was aware of these areas, but action in most of these cases would involve changes to the collective agreement with letter carriers.

13.33 In addition, the Post Office has identified other possibilities for cost savings, but these would entail a reduction in the present level of letter carrier service.

13.34 Labour relations. The Post Office has introduced a number of innovative labour relations and communications programs to improve this aspect of postal operations. Unions and management have demonstrated a willingness to co-operate by participating in consultations. There was, however, a need for greater participation by managers at all levels in the improvement of labour relations and communications programs and for increased training of first line managers to enable them to promote a more co-operative work environment.

13.35 Collective bargaining. The management process included a formal approach to the identification of issues to be negotiated. These issues were used to develop general strategies and objectives for annual negotiations consistent with long-term labour relations goals and strategies. However, objectives for negotiations were not established beyond the current year. As a Crown corporation, the Post Office will have greater opportunity to establish goals for future negotiations and to develop strategies for dealing with management and union proposals.

13.36 Human resource planning. The Post Office had satisfactory human resource planning procedures to identify shortages and surpluses for senior management positions. There was a need, however, to develop procedures to forecast long-term shortages and surpluses for all major groups of employees and to use engineered work standards, where appropriate, to project human resource requirements.

13.37 The Post Office as a Crown corporation. As a regionalized organization, delivering 80 per cent of mail within 200 miles of the point of origin, the

Post Office has the opportunity to respond to local needs. However, because the postal service is national, there is a need for some form of centralized control and systems to co-ordinate the operations of the regions. Although the reporting systems have a national orientation, largely in response to central agency requirements, management of operations is at a local level. The reporting systems, therefore, do not adequately meet the needs of operational managers. Conversely, although the Headquarters group is responsible for providing national co-ordination and direction, it perceives that it has only limited control, except through the Deputy Postmaster General, over field operations. The balancing of central control with local autonomy is a matter that needs to be carefully addressed by the new Canada Post Corporation.

13.38 Also of major consequence are the matters of postal rates, levels of service and improvements in service reliability, labour relations and productivity. These issues must be addressed and answered if the Post Office is to achieve its objective of financial self-sufficiency as a Crown corporation. Changes in these areas will require a high degree of co-operation between management and employees and between the Post Office and the public.

13.39 The Canadian public's loss of confidence in its postal service is based partly on unrealistic demands that the Post Office be all things to all people, partly on misconceptions, and partly on real evidence of poor service. To restore full respect will require not only improvements in mail reliability but also a public perception of a generally well managed institution.

13.40 Conversion to Crown corporation status is expected to have a positive effect on employer-employee attitudes and give management more flexibility, but these expectations should be followed up by Parliament.

Observations and Recommendations

Program Effectiveness

13.41 The objective of the Post Office is to supply postal services to the people of Canada at rates which will provide a standard of service adequate to meet their needs, without incurring a loss. There may, however, be subsidization to cover losses specifically attributable to meeting other government objectives.

13.42 In carrying out its mandate, the Post Office needs processes to:

- identify what types and levels of service Canadians desire; and
- determine standards of service and rates to meet the needs of Canadians without incurring a loss.

13.43 To determine its effectiveness, the Post Office needs satisfactory procedures to:

- measure the level of service actually provided against the standards; and
- quantify the extent to which losses are due to meeting other government objectives.

The focus of our audit was, therefore, to assess whether the Post Office had satisfactory procedures in place to evaluate its program effectiveness.

13.44 Postal needs of Canadians. The Post Office has defined postal needs in terms of speed, reliability and availability of postal services to the public and has developed service standards in these areas. In establishing the standards, it has given consideration to available resources, operational feasibility, competitive services, standards set by other postal administrations and market surveys of user needs.

13.45 As discussed later under Corporate Planning and Control, the Department's costing system was inadequate to support management in its analysis of trade-offs between users' needs, service standards, postal rates, operating costs and revenues.

13.46 Measuring performance. The Post Office has national systems in place to measure performance regularly in terms of the speed and reliability of a number of postal services, including approximately one-half of first class mail and all of fourth class mail. Second and third class mail was measured infrequently on a national basis. Our audit of the national system that measures performance of first class mail revealed a number of weaknesses. These are reported later under Measuring Service Reliability. The mail that was regularly measured represented only about a third of the total mail volume.

13.47 Without regular measurement of performance of all major services, the Post Office cannot evaluate whether it is meeting its service standards or the postal needs of Canadians. Performance information is required for use in determining trade-offs among level of service, rates and cost.

13.48 *The performance of all major services should be regularly measured, the results compared to established standards of service, and appropriate action taken when there are significant differences between actual and standard.*

13.49 Availability of service refers to the ease of access to postal services. Although national directives had been prepared on the aspects of service availability related to letter carrier delivery service, street mail box collection service

and operations of post offices, no aspects were being formally monitored on a national basis except the number of delivery points not receiving letter carrier service. In this case, a national system is in place to report the number of delivery points which could have been, but were not, receiving letter carrier service because of resource constraints. For other aspects of service availability, the Post Office had generally relied on complaints from users to gauge their satisfaction or dissatisfaction and the appropriateness of national directives.

13.50 Although some studies had been conducted, such as those relating to street letter boxes, the cost and revenue implications of these directives had not all been assessed. There was no formal method of ensuring that the directives were appropriate, were being followed or were revised as required.

13.51 *Procedures should be instituted, where practical, to monitor adherence to national directives on service availability, assess their cost and revenue implications, and evaluate their continuing appropriateness.*

13.52 **Other government objectives.** As part of its objective, the Post Office is charged with not incurring subsidization from general taxation other than that required to cover losses specifically identified in relation to other government objectives. The Post Office has identified a number of losses related to other government objectives, such as publication mailings which are now subsidized, and is in the process of identifying further government objectives and their associated costs and revenues for which subsidization could be provided. Without clarification and costing of all other services provided by the Post Office in support of other government objectives, it is not possible to determine the costs and revenues related solely to postal services. Therefore, this lack of cost and revenue information makes it difficult to hold management accountable for the extent to which the stated objectives have been achieved.

13.53 *The Post Office should identify, to the extent practicable, all services that are in support of other government objectives and determine the costs and revenues reasonably attributable to them.*

Corporate Planning and Control

13.54 In a department as large and decentralized as the Post Office, effective corporate planning and control processes are essential. We reviewed the systems and processes by which management gives overall direction and control to the Post Office. We also examined the information available for planning, procedures for preparing plans, and processes for making, implementing and monitoring planning decisions. Of specific interest were:

- the processes for identifying postal needs of Canadians, including the types of services demanded, the subsequent translation of these needs into services and the related standards of service;

- the process for establishing long-term strategies and goals; and
- short-term planning of departmental operations and the monitoring of achievement against the operational plans.

13.55 Our audit was of the corporate planning and control system as it was prior to 31 March 1981. Since then, the Post Office, through its IMPAC Action Plan, has taken steps to remedy many of the deficiencies noted below. Management also recognizes the need for an effective planning and control process if the Department's transformation into a Crown corporation is to meet the objectives set for the Corporation.

13.56 Planning process. The Post Office's planning cycle consisted of three main phases: corporate, business, and financial. Corporate planning was the phase in which senior management established overall objectives and strategies and set corporate performance goals. This first phase, which took roughly five months, started some 29 months before the applicable fiscal year. It culminated in the Deputy's written request for business plans initiating the second phase.

13.57 Business planning, the second phase, began 23 months before the fiscal year covered by the plan. The major product of business planning was a set of independent standard performance goals against which performance is measured, covering such items as service level, mechanized yield, person-year usage, overtime, productivity, mail volume, revenue and expenses. Specific performance goals were established in the business plans for each area of operation. This phase took 10 months.

13.58 The final phase, financial planning, began 19 months before the applicable fiscal year and partially overlapped the business planning process. In this phase, regions and directorates calculated the resources required to implement the proposed business plans. This was decided largely on the basis of resource ceilings established by Treasury Board in the fall before the start of each fiscal year. Financial planning was geared to the government-wide Program Forecasts and Main Estimates planning cycle and requirements which constrained the development of a more suitable planning process for the Post Office.

13.59 Senior management devoted considerable attention to planning, and responsibility for it was reasonably well established, agreed to and implemented. The Post Office assessed its environment, surveyed user needs, evaluated corporate strengths, weaknesses, opportunities and threats, and analysed costs and benefits of proposed services. Management made considerable effort to understand its environment and markets. However, there were weaknesses in this assessment because senior managers did not have adequate background information on matters such as resource restrictions, service level trade-offs and operational and cost implications of various courses of action.

13.60 There were annual analyses of strengths, weaknesses, opportunities and threats for individual products and segments of postal operations. During the corporate planning phase, an overall assessment of the Post Office was prepared by the Marketing and Operations Directorates.

13.61 For short-term operational planning purposes, senior management set objectives and goals more than two years in advance of the applicable fiscal year. To do so, they had to make predictions and assumptions about events two to three years in the future. This long lead time increased the risk that predictions would be faulty and that the assumptions on which the Department's plans were based would be invalid by the time of plan execution.

13.62 Similarly, in the business planning phase, program commitments were made more than 12 months before the start of the applicable fiscal year -- before resourcing was fully established under financial planning and before person-year allocations had been fixed by Treasury Board. Managers were, therefore, making commitments to programs without fully knowing what resources were required or available. Further, because business planning preceded financial planning and dealt more with performance goals than resourcing, there was inadequate integration of business and financial planning.

13.63 The allocation of person-years across the organization had become an inflexible process. Business and financial plans were not adjusted during the period of their execution. An effective planning system should be dynamic and have enough flexibility to reflect changed conditions such as increased mail volumes or changes in product mix. Under a fixed system, variances from plan might give rise to misleading explanations or provoke inappropriate corrective actions. The extent to which an organization can or should react to significant environmental changes should be the criterion for designing a planning system.

13.64 The planning process was further handicapped by the lack of an adequate costing system whereby the costs of specific operations could be forecast to permit managers to calculate the costs and benefits of alternatives to existing services or of proposed new services.

13.65 *The Post Office should revise the planning process to:*

- *provide management with the environmental, resourcing, operational and other information it requires as input to its planning decision-making process;*
- *shorten the planning cycle so that decision points are closer to the start of the applicable fiscal year;*
- *permit better integration of business and financial planning; and*

- permit adjustment to plans and budgets to reflect current environmental and operating conditions.

13.66 *The Post Office should develop an appropriate cost accounting system.*

13.67 **Controlling.** The Post Office had a system for monthly reporting of actual results against predetermined performance goals. This information, when reviewed by the senior management group in its monthly meeting, was about six weeks old. On occasion, the financial component of the monthly reports was even older. For some of the performance measures reviewed, such a delay was not significant, but for others a prompter review was required. However, operating managers had their own local systems to report results on a more timely basis.

13.68 Although the monthly reports did provide a comparison of actual results against individual performance goals, there was no single comprehensive measure, in dollars or other terms, to assess the efficiency or economy of operating performance on an overall basis. There was, in effect, no "bottom line". Because there was no composite measure for all goals, it was difficult to evaluate the efficiency or economic consequences of having met some of the standard performance goals, but not others. As a Crown corporation with the objective of financial self-sufficiency, there will be a need for greater attention in the future to financial performance.

13.69 Because there was potential conflict between performance goals, such as reducing person-years while increasing level of service, it was unlikely that all goals could be simultaneously achieved. The costing and reporting systems did not provide managers with appropriate information for making trade-offs between the performance goals or for allocating and managing resources.

13.70 *The monthly reporting process for the standard performance measures should be revised to ensure that the most appropriate and timely information is being presented, taking into consideration the need to give managers at all levels better information with which to determine trade-offs between performance goals and to assist them in making operational decisions.*

Management of Mail Operations

13.71 The basic sequence of operations for first class mail within a city is as follows:

Day 1, morning and afternoon:

- collection of mail from street letter boxes and post offices and delivery by truck to mail processing plants.

Day 1, evening and night:

- receipt by processing plant of locally collected mail and mail sent from other cities; sorting of mail by mechanical or manual means; mail destined within the surrounding urban area (local mail) delivered by truck to postal stations; mail for other centres (forward mail) transported by air, rail or road to the processing plant servicing the destination area.

Day 2, early morning:

- receipt of sorted mail at local postal stations and distribution to letter carriers who organize the mail according to the sequence of their routes.

Day 2, morning and afternoon:

- delivery of mail by letter carriers.

13.72 The collection, processing and delivery of mail in any postal system is complicated by several factors:

- dramatic changes in volume within the week and between seasons, making it difficult to schedule both staff and production;
- variety in the size and shape of mail, much of which is not within the dimensions of standard mail acceptable to the sorting machines, thereby causing a high level of rejects;
- the variety of mail services, each with a different speed and cost, which complicates production and transportation scheduling;
- the number of handling processes that can be automated to only a limited degree, requiring a large labour force; and
- commitment to deliver mail to nearly every address in the country, requiring a massive distribution network.

13.73 Even with the construction of mechanized mail processing plants, the introduction of a postal code, and campaigns by the Post Office to standardize mail, a significant portion of all mail and a large portion of mail which should be acceptable to the mechanical sorters (machineable mail) has to be manually sorted. A major contributor is the mailing habits of the public, such as using odd sized envelopes, improperly addressing letters, and mailing in the late afternoon. An additional factor is the priority given by the Post Office to meeting delivery deadlines that can involve manually sorting machineable mail that might otherwise be delayed.

13.74 The Post Office provides Canadians with the following seven major postal services:

- First Class - correspondence, post cards, business reply mail, printed accounts, receipts, cheques and other financial instruments.
- Second Class - registered newspapers and periodicals.
- Third Class - greeting cards, advertising matter (both addressed and unaddressed), small parcels up to 500 grams, books and unregistered periodicals.
- Fourth Class - parcels weighing between 500 grams and 16 kilograms.
- Priority Post - next day delivery in Canada for users under individual service contracts.
- Telepost - electronic mail communication service in which messages, via CN/CP telecommunications network, are delivered by hand from a designated post office.
- Special Services - registered mail, certified mail, money orders, special delivery, C.O.D., insurance, etc.

13.75 In addition to classes, mail is also defined in terms of being standard or non-standard. Standard mail is mail meeting predetermined size, weight and thickness requirements. It is machineable provided that it is also properly addressed, including postal code, although addresses can be typed or neatly hand written. Mail is perfectly machineable if it meets the tight tolerances on size, type face, position of postal code, etc. required by the optical character reading equipment. Non-standard mail is mail not meeting these requirements.

13.76 We reviewed several of the key processes used to manage the major postal operations of the Post Office to assess whether due regard for economy and efficiency had been observed. We concentrated on:

- mail processing - the procedures in place to manage processing plant operations on a day-to-day basis;
- national mail distribution - the management controls to plan and monitor the movement of mail between major centres in Canada;
- letter carrier service - the basis of assigning work to letter carriers; and
- service reliability - the national systems to measure the performance of mail services against the delivery standards set by the Post Office.

13.77 **Mail processing in postal plants.** We reviewed the systems and procedures by which plant management plans, controls and improves the processing of mail through the mechanized postal plants.

13.78 In the 25 major urban centres across Canada, there are 29 mechanized plants -- 27 letter processing facilities and 2 bulk mail plants for parcels and containers. These plants are large industrial sites employing from 500 to 2,000 workers.

13.79 At least a third of the total Post Office complement of 60,000 person-years is involved in mail processing. The plants are the points in the total mail collection, processing, transportation and delivery system where bottlenecks are most likely to occur. They are also one of the areas in postal operations with the greatest potential for productivity improvement.

13.80 Because most organizations mail in the late afternoon, the Post Office schedules collections to bring mail to the processing plants in the early evening. To meet delivery standards, it has set processing deadlines that require the mail to be out of the plants, particularly mail that is to be forwarded to another city, by the early hours of the following morning. Accommodating the public's mailing habits and meeting service standards, therefore, result in a narrow time limit for processing and impose severe production demands on the processing plants.

13.81 We found that there was no national policy on whether there should be an operational planning and control system in each plant or on what the basic objectives and elements of such a system should be. There was, however, a national guideline outlining how such a system could work, and recent business plans of the plants have included improvements in their planning and control systems. The complexity of the system required depends on the size of the plant and the mixture of mail it receives. However, because plants have been developing or upgrading their own systems, the extent of operational planning and control varied from plant to plant. The basic elements of forecasting, scheduling and monitoring were generally in place at the plants visited, but there were weaknesses and inconsistencies in carrying out these functions.

13.82 The introduction of large mechanized plants and new procedures has made changes necessary in the traditional roles and relationships of operational management, production planning and control units in the plants, and mail processing management at the district level. These changes have resulted in divided responsibility among them for planning, scheduling and control. This has led to a weakening of these functions and to duplication of information and effort.

13.83 There are clauses in the collective agreement with inside workers, such as those relating to the use of part-time and casual workers, daily sick leave and measuring productivity that, in the opinion of management, restrict the

ability of plant managers to make the best use of resources and to manage consistently with due regard to economy and efficiency.

13.84 In general, the operational planning and control systems did not provide plant managers with adequate cost and productivity information for assessing performance and evaluating the efficiency of alternative processing methods. For example, in those situations where there was a choice between not meeting service standards or doing so but incurring extra costs, the system did not highlight the extra costs involved.

13.85 In many instances, adequate data on forwarded mail volumes were not communicated to other plants, particularly those in different districts, making it difficult for the receiving plants to plan and control their activities.

13.86 Because of the importance of mail processing plants in the total postal system and the extent of their use of person-years, effective operational planning and control procedures are essential.

13.87 *The Post Office should ensure that appropriate operational planning and control procedures are in place in all plants and that roles and responsibilities in relation to these functions are clearly defined and communicated to all concerned.*

13.88 Our audit disclosed that engineered work standards were generally not available and, where they were available, were generally not being used for staffing, scheduling operations or monitoring performance. The Department, therefore, did not know the extent to which:

- plant capacity was being efficiently utilized;
- standards were being met; and
- human resource savings could be achieved through productivity improvement.

13.89 The mechanization program begun in the early 1970s is nearing completion. Two prerequisites for the success of the program, acceptance of the postal code and start-up of all plants, have been realized. One of the key justifications for introducing mechanization was to achieve savings in human resources. Studies by the Post Office show that although there have been some savings in this area, they have not been as large as originally anticipated. The use of engineered work standards in productivity improvement programs could help in achieving further human resource savings.

13.90 *Engineered work standards should be developed for all major mail processing functions and should be used to determine the extent to which productivity improvements can be achieved and to assist in staffing and production planning.*

13.91 **National mail distribution.** This section of our audit assessed the planning and monitoring of the movement of mail between major centres in Canada. A large amount of the mail is processed and forwarded by the mail processing plants to plants in other cities across Canada. Mail is transported by air carriers and railways and, to a limited extent, by road. The two main factors affecting the choice of transport are the class of mail and the distance between cities. Other considerations are the schedules and capacities of air carriers.

13.92 Canada's size and weather conditions make planning and control of inter-city transportation a key element in postal operations. From a national perspective, we found that the procedures in place were appropriately designed to meet the needs of a distribution system.

13.93 Transportation services were generally acquired with due regard to economy, and the associated contracts were administered satisfactorily. The Post Office had recently achieved annual savings of approximately \$650,000 without affecting the level of service by converting some highway service to rail and by changing the frequency of shipments and the size of the units.

13.94 The emphasis placed on meeting local service standards gave higher priority to processing and monitoring local mail than forwarded mail. However, systems implemented recently should improve controls to ensure that forwarded mail meets time and processing standards.

13.95 **Letter carrier service.** We reviewed the procedures used to structure letter carrier routes and to manage letter carrier operations.

13.96 To reach the 6.3 million potential points of call five days a week, the Post Office employs about 18,000 letter carriers to cover approximately 14,500 established routes and to provide assistance and relief for illness and leave. Included in the established routes are 234 business routes providing two deliveries a day and 287 with three deliveries a day.

13.97 A letter carrier's work day includes sorting and preparing mail as well as delivering it. It is based on a standard of 480 minutes and is structured by a comprehensive system, using work method study and measurement techniques to arrive at time values for each task.

13.98 The volume of mail, the number and type of delivery points and the terrain are considered in structuring a route. The volume of mail for a route is determined by an actual count of mail delivered over a two-week period and adjusted for seasonal fluctuations. Included in the 480 minutes are transportation allowances to get letter carriers from the depot to their routes and a round trip for lunch, and personal allowances for rest periods and wash ups.

13.99 The route measurement system is designed to allocate an eight-hour work day to a letter carrier if the tasks are performed as laid out in the structured design. However, departmental studies indicate that a majority of letter carriers take only five to six hours to do their assigned work on most days. Because they can go home after their mail has been delivered, letter carriers have an incentive to reduce their 480 minutes of structured work in various ways. These time savers include taking short cuts by walking across lawns and driving their own cars to and from routes rather than taking public transportation. They may also not take all the personal time allowances included in the structured route, and they may work at a pace faster than the standard. Although letter carriers may not necessarily walk their routes exactly as designed, they are delivering the mail assigned to them each day. Having letter carriers walk their routes as structured would not improve efficiency or result in more mail being delivered.

13.100 Daily mail volumes fluctuate throughout the week. In the original design of the route measurement system, these fluctuations were taken into consideration by calculating overtime averaged over a 40-hour work week. However, the collective agreement with letter carriers now calls for the payment of overtime on a daily basis. As a result, letter carriers are paid overtime on high volume days when they work more than eight hours, and are paid for a full day on low volume days when they work fewer than eight hours.

13.101 To clear mail backlogs, plants may work overtime on weekends. In anticipation of expected higher volumes caused by these processing backlogs, letter carriers are called in early and paid overtime on the following Mondays. However, the higher volumes had already been taken into consideration in establishing the routes. We noted that for some periods during the year in certain areas of the country payment of this overtime occurred fairly regularly.

13.102 Most routes contain a daily transportation allowance of 80 minutes or less for the letter carriers to travel, generally by public transportation, to and from their routes. Because of a provision in the collective agreement, the Post Office cannot change the mode of transportation of a route governed by the use of public transportation for which the total transportation allowance is 80 minutes or less. As a result, the Department is unable to reduce overall letter carrier costs even though opportunities for savings have been identified in this area.

13.103 Many of the routes have not been completely remeasured since the inception of the route structuring system 10 years ago. The degree of error in the original measurement of the routes has, therefore, not been quantified and corrected except in isolated instances.

13.104 *The Post Office should review its present procedures relating to the provision of letter carrier service with a view to increasing economy and efficiency.*

13.105 The Post Office has considered several alternatives to the present level of service relating to letter carrier delivery, including:

- reduction of multiple delivery on many business routes;
- alternate day delivery on residential routes;
- delivery to the residential property line rather than the front door; and
- delivery to groups of boxes rather than residences.

13.106 In some cases, the present level of service would be reduced and, although considerable savings might be made, reduced revenues might also result. Depending on how they were introduced, however, these alternatives could have serious implications for collective bargaining.

13.107 **Measuring service reliability.** We reviewed the extent to which the Post Office measured and reported on the service reliability, that is speed and consistency of delivery, of its major postal services. In particular, we assessed the adequacy of the National Evaluation of Postal Services (NEPS) system which measures service performance for first class mail. As part of our review, we carried out our own test of mail service in and between three cities.

13.108 Reliable information on the quality of mail service is critical to the Post Office if it is to meet its objective of providing a reliable mail service to Canadians. Even if 95 per cent of the mail is delivered on time, as many as 800,000 of the 16 million pieces of first class mail delivered each day in Canada would arrive late, giving rise to a potential cause of customer dissatisfaction. Reliable information is required not only for public reporting purposes, but also for internal managerial use. Quality of service is an area of interest to Parliament and to mail users.

13.109 The Post Office systematically measures on a national basis the local and forward mail performance of first class machineable mail, fourth class mail, priority post and telepost. It also tests second and third class mail on an irregular

and localized basis and has procedures for co-operative testing with a number of large volume mailers. Despite these efforts, it has limited its systematic measurement of mail performance to approximately one third of its annual mail volume. The largest portions of mail not systematically measured are the manually processed first class mail, which accounts for approximately half of the first class volume, and most of the third class mail. The Post Office did not regularly publish the results of its mail performance tests. When the Department did release performance figures, they were usually NEPS results.

13.110 *The Post Office should ensure that it has appropriate measurement systems in place to monitor service performance for each of its major postal services.*

13.111 *The Post Office should report publicly the mail performance of its major postal services at least annually.*

13.112 The Post Office has established service standards for certain of its postal services. For example, the following standards apply for first class standard mail:

- 1-day (overnight) delivery within a local area and between about a dozen traditionally paired cities, such as London and Hamilton;
- 2-day delivery between most other cities in Canada; and
- 3-day delivery, principally between cities located on opposite coasts of Canada.

13.113 A comparison of the Post Office's national performance goals established against these standards and actual national results for the year 1980-81 follows:

Performance Goals and Actual Results
for First Class Standard Mail for 1980-81

	<u>Percentage of Mail Delivered Within Time Prescribed:</u>			
	<u>Local Mail</u>		<u>Forwarded Mail</u>	
	<u>Performance Goal</u>	<u>Actual Results</u>	<u>Performance Goal</u>	<u>Actual Results</u>
April to November	95%	89%	90%	66%
December	50	73	50	60
January to March	90	87	85	59

13.114 Principally for managerial purposes, the Post Office uses the NEPS system to measure first class mail performance. It is an extensive testing system which provides management with a regular reading on the trends of the Department's service performance. The system also highlights areas of the country where there are service problems.

13.115 In our opinion, when the Post Office reports on the quality of its mail service, the public would expect the measuring system to test:

- the type of mail the public most frequently uses; and
- the processes through which the mail is most likely to pass.

13.116 On this basis, we found that NEPS had the following weaknesses which reduced its appropriateness for reporting publicly the quality of mail service:

- The full mail operation was not measured, in that collection from street letter boxes, delivery to the processing plants and delivery by letter carriers were excluded.
- The Post Office sampled with perfectly machineable mail, which was not representative of all types of standard mail capable of machine processing.
- The sample mail was not representative of the split of first class mail between manual and mechanical processing since less than 20 per cent of NEPS test mail was manually sorted while the average for first class mail was about 50 per cent.
- The system did not measure the length of delays or the amount of mail that was lost or damaged.
- In publicly reporting performance goals and actual results, the Post Office had generally not fully disclosed the limitations of its measurement process nor had it fully explained the meaning of its figures.

13.117 To assess whether these factors might have an impact on the results reported by NEPS, we developed an independent statistically-based test to measure:

- the mail performance of local first class mail in the cities of Toronto, Ottawa and Vancouver, which account for approximately 30 per cent of the NEPS mail volumes, for the months of January and February 1981; and
- the performance of mail forwarded between each of the three cities for two weeks in each of the months of January, February and April 1981.

13.118 The purpose of our test was to determine the extent of any difference between the results of the Post Office's measurement and our results, given that, in contrast to the Department's methods, we:

- measured the total mail process from pick-up at street letter boxes through to delivery at household and business addresses; and
- expanded the types of test mail to include handwritten and typed addresses, different coloured but standard sized envelopes and stamped and metered mail.

13.119 In summary, the results of our tests were as follows:

- For forwarded mail performance, our results were essentially the same as those reported by NEPS for the three months tested.
- For local mail, our test indicated a lower mail performance for the three test cities for the two months tested than that reported by NEPS.

More complete details of our findings are noted below.

13.120 The results of our test of forwarded mail service reliability between the three cities compared to the results reported by the Post Office were as follows:

Forwarded Mail Reliability Tests - First Class Mail

	<u>Number of Letters in Sample</u>		<u>Results (% delivered on time)</u>	
	<u>Dept's. NEPS Test</u>	<u>OAG's Test</u>	<u>Dept's. NEPS Test</u>	<u>OAG's Test</u>
Combined results for all three test cities:				
January 1981	595	497	51%	51%
February 1981	594	487	53	51
April 1981	588	512	50	49

13.121 The differences between the Department's NEPS test for the three test cities and our results are not statistically significant.

13.122 The results of our test of local service reliability compared to those of the Post Office are shown in Exhibit 13.2. Observed differences as shown in this exhibit are the simple arithmetical differences between the results of our tests and those of the Department. They are the best estimates of the true differences

POST OFFICE DEPARTMENT
LOCAL MAIL RELIABILITY TESTS - FIRST CLASS MAIL

	January 1981				February 1981			
	<u>Percentage Delivered on Time</u>		<u>Observed Differ- ence</u>	<u>Minimum Probable Differ- ence</u>	<u>Percentage Delivered on Time</u>		<u>Observed Differ- ence</u>	<u>Minimum Probable Differ- ence</u>
	<u>Dept's NEPS Test</u>	<u>OAG Test</u>			<u>Dept's NEPS Test</u>	<u>OAG Test</u>		
Performance of Local Mail Within the Three Test Cities								
Toronto	91%	80%	11%	7%	86%	77%	9%	5%
Ottawa	90	85	5	2	93	85	8	5
Vancouver	81	68	13	7	82	72	10	5
Combined Results for all Three Test Cities								
Combined Results	86%	75%			85%	75%		
Number of Letters in Sample	2,154	1,086			2,122	1,049		

which could occur between our results and those of the Department because of the differences in our testing methodology.

13.123 However, because the tests were based on statistical samples rather than a complete count of all mail delivered during the test period, the measures of difference could be affected by chance occurrences and random events. The potential effect of chance can be statistically calculated and applied to the observed differences to yield the minimum probable differences shown. It is very likely that the real differences between our results and those of the Department are at least as large as the minimum probable differences.

13.124 Based on our work, we are reasonably confident that there were real and significant differences between our results and NEPS results; NEPS claims a higher local service reliability than our methodology would support. In our opinion, for public reporting, the Department's results would overstate local service reliability for the three test cities in the two months tested.

13.125 *For publicly reporting the quality of first class mail service, the Post Office testing procedures should be modified:*

- *to measure the performance of mail that is processed manually;*
- *to reflect the total mail handling process; and*
- *to include the variety of sizes of envelopes, methods of addressing, etc. used by the public.*

13.126 *For publicly reporting mail service performance on any of its postal services, the Post Office should specifically state the methods used in arriving at its test results.*

Payroll Costs Management

13.127 Our audit reviewed the management of labour relations, the preparation for collective bargaining and human resource planning and training.

13.128 **Management of labour relations.** Labour relations management in the Post Office includes establishing and implementing negotiable terms and conditions of employment and associated redress processes. It also includes other related activities designed to improve relationships between the employer and the employees and their representatives. As part of our audit, we reviewed the programs, processes and activities that have been designed to promote harmonious employee relations and are directly under the control of Post Office management.

13.129 There has been a history of difficulties in labour relations in the Post Office, which have intensified in the last decade, reaching a peak during the period of mechanization. These difficulties have sometimes been complicated by the involvement of central agencies in such areas as collective bargaining.

13.130 Co-operative efforts between employees, their unions and management are being made to improve labour-management relations. In spite of these constructive efforts, improvement in labour relations is still required. Results cannot be expected either quickly or easily.

13.131 A formal written labour relations philosophy has been developed by management and communicated throughout the organization. However, our review revealed that this philosophy had not always been reflected in action plans with specific targets at each level across the organization. There is a need, which is recognized by senior management, to obtain commitment to, understanding of, and acceptance of good labour relations objectives, procedures and plans by supervisors and managers throughout the organization.

13.132 Management has recognized the need to improve labour-management relations. A number of innovative labour relations and communications programs have been introduced in an attempt to achieve improvement. For example, an organization-wide communication program known as Cascade has been used to convey information to postal employees. A process known as Intergroup was also introduced to encourage union representatives and management to meet, discuss common problems and attempt to find solutions. Unions and management have demonstrated a willingness to co-operate by participating in consultations.

13.133 Because of the impact of labour relations on the success of the Post Office, it is important for management to know whether the labour relations programs are having their desired effect. The Post Office has attempted to evaluate these programs in various ways. Most of the approaches to evaluation have not included employee feedback, except for the Intergroup Program, and generally were not performed on an ongoing basis.

13.134 Further, in our opinion, there was a need for greater input from managers, at all levels, in the improvement of labour relations and communications programs. An acceptance of and commitment to these programs by managers, particularly at the supervisory level, is essential to their success.

13.135 A formal survey, including requests for feedback from managers, would be one way of obtaining information on the effectiveness of the programs, as well as encouraging the participation of managers in improving the programs. There are also other yardsticks that would be useful in evaluating labour relations, most of which are being monitored by the Department. These include staff turnover, absenteeism, number of grievances, and so on.

13.136 *The Post Office should expand its efforts to evaluate systematically the effectiveness of its labour relations and communications programs.*

13.137 Although organizational responsibilities and administrative practices were clearly defined within the Post Office, labour relations specialists were sometimes called on to carry out labour relations responsibilities that had been assigned to line managers. Even though line managers had received some training in this area, they did not believe that it was sufficient to permit them to discharge their responsibilities satisfactorily.

13.138 Senior management recognizes the need to foster constructive attitudes and relationships in the labour relations area to create a more co-operative work environment. A number of training programs designed to achieve such changes are now in place. However, it will take some time for the desired changes to occur and for some line managers to acquire the skills necessary to promote such an environment.

13.139 *Line managers should receive additional training to enable them to better carry out the labour relations responsibilities assigned to them.*

13.140 **Collective bargaining process.** Our audit included a review of the processes followed by Post Office management in preparing for collective bargaining and in identifying issues for negotiation. We did not examine actual negotiating processes or their results.

13.141 The Post Office was administering contracts with 29 bargaining units and actively participated in negotiating a number of them. This included collective bargaining for the two largest units, Canadian Union of Postal Workers (CUPW) and Letter Carriers Union of Canada (LCUC), which make up more than two-thirds of the total work force. Collective bargaining was conducted within the framework of the Public Service Staff Relations Act. This Act and several others restricted the items that were open to negotiation.

13.142 A number of groups have played a significant role in the negotiation process, but the Treasury Board, as the employer for government departments, had primary responsibility for collective bargaining. In recent years, Treasury Board has delegated responsibility for the negotiation of certain postal union contracts to Post Office management under very specific bargaining mandates. In spite of this delegation, Treasury Board has remained closely involved in the process because of the concern that precedents could be set for other public service contracts. To obtain clarification of the roles and responsibilities of Treasury Board and Post Office management in the collective bargaining process, we met with Treasury Board representatives. We found that, in the preparation for negotiations, Post Office management carried out the responsibilities delegated by Treasury Board.

13.143 The Department formally sought the views of managers throughout the organization on what issues required negotiation. These issues were used in developing general strategies and objectives to be used in current year negotiations. These negotiation strategies were developed taking into consideration the long-term goals and strategies for labour relations. However, we also noted that goals and strategies for negotiations beyond the current year had not been established.

13.144 As a Crown corporation, the Post Office's responsibilities in the area of collective bargaining will be significantly increased. Thus, the Post Office will have greater opportunity to establish goals for future negotiations and to develop a comprehensive approach to identifying and evaluating the cost, operating and administrative implications of union and management proposals, and strategies for dealing with them.

13.145 *Bargaining objectives for future negotiations should be established and strategies for achieving them should be developed.*

13.146 **Human resource planning.** We examined the systems for ensuring that the appropriate number of people are available with the required skills, when and where they are needed.

13.147 In the operational planning process, human resource planning is based on targets and productivity levels determined from historical data, rates and comparisons, and projected changes. Human resource allocations are made to each of the regions in conjunction with the person-year budget approved by Treasury Board. The allocations are then further allotted by the regions to the districts.

13.148 Engineered work standards were not being used to the extent possible to establish human resource requirements, except in the structuring of letter carrier routes. Measured work standards existed in a number of areas and were being implemented for mail service couriers and counter service. Work standards for manual mail processing, which had been developed at one time, were no longer being used. Without work standards, it was not possible to determine if human resource levels were appropriate to ensure economic and efficient operations.

13.149 *Engineered work standards should, where applicable, be used as the basis for establishing human resource requirements and making human resource allocations.*

13.150 Analyses were carried out to identify potential vacancies for key or senior staff positions and, as necessary, to determine the availability of successors. In many cases, supervisors and managers had been included in these

analyses, at least to the extent of identifying shortages or surpluses. No analysis had been conducted and no formal process existed to plan for long-term surpluses or shortages for the majority of other employees. Personnel requirements are changing over time and will continue to do so as technology changes and demographics and related mail volumes shift. This increases the possibility that present human resource planning efforts will not be sufficient to ensure that the personnel requirements imposed by these changes are met.

13.151 *The Post Office should implement procedures to forecast long-term shortages and surpluses in all major human resource groups and to develop action plans for dealing with them.*

13.152 **Training.** We reviewed procedures for identifying training needs to meet skill and knowledge requirements to improve job performance and to cope with technological and other changes.

13.153 The responsibility for identifying training needs and for ensuring that training takes place rested appropriately with managers throughout the organization. As a result, a great deal of training was provided to meet local needs. However, no central group was responsible for developing and maintaining an information system on available training programs or for ensuring that the effectiveness of the training provided was evaluated. A central group was responsible for preparing an annual report on the cost of all training.

13.154 *Responsibility should be assigned to a central group for developing an information system on available training programs and ensuring that, across the Post Office, training needs are identified and the effectiveness of training is evaluated.*

Financial Controls, EDP and Internal Audit

13.155 **Revenue protection.** We examined the procedures and controls for detecting inadequate postage and collecting postage due.

13.156 The mailer generally determines the postal rate and uses the appropriate postage meter impression or stamp. The same is true of the large volume mailer, who determines the number of pounds or number of pieces in a bulk mailing, applies the rate and enters the total postage charge on a statement of mailing accompanying the mail to the post office or postal facility. Although the Post Office had formulated procedures for detecting inadequate postage and collecting postage due, these procedures were difficult to carry out on a consistent basis because of unclear responsibilities, inadequate training of staff, high volumes of mail at certain times of day and the pressure to meet delivery standards. As a consequence, the Post Office had limited information on the amount of revenue lost, even though it knew the major areas where postage was

likely to be inadequate. Under the IMPAC Action Plan, a task force has been assigned responsibility for dealing with this problem and recommending appropriate action.

13.157 Money order liability. The Post Office issues approximately 27 million money orders annually, resulting in cash transactions of about \$2.5 billion. It also administers the cashing of a large number of foreign money orders on behalf of other postal administrations. The present money order computer system to control this operation has been in place for approximately ten years. At 31 March 1981, liability for outstanding money orders accounted for about \$61 million of the total Post Office liabilities of \$76.9 million reported in the Public Accounts of Canada.

13.158 Chapter 6 of our 1977 Report, on the Computer and Information Systems Evaluation (CAISE) study, recommended that the Post Office should implement procedures to reconcile the money order reports to the general ledger in order to ensure the accuracy of reports and to permit the use of computer records to support account totals. This recommendation had not been implemented at the time of our comprehensive audit.

13.159 As part of our audit, we attempted to carry out a reconciliation of outstanding money order files to the general ledger for \$55 million of the \$61 million outstanding money order liability at 31 March 1981. We originally estimated a potential net difference which indicated the Post Office had understated its money order liability by \$5.5 million. Since our audit, additional information has been provided that could affect the reconciliation; therefore, it was not possible to determine the exact difference, if any. The major problem is that the system was designed to ensure that money orders are properly payable and not to facilitate reconciliation between money order files and the general ledger accounts. Also included in the \$61 million liability was an outstanding balance of \$4.7 million accumulated over many years and representing pre-1970 money orders which we could not verify because the Post Office could not provide supporting documentation.

13.160 *The Post Office should establish appropriate accounting controls over money order liability accounts.*

13.161 Management of electronic data processing. Our review concentrated on management practices related to the use of EDP resources, particularly in the planning for these resources.

13.162 The Post Office spends approximately \$10 million annually and employs 270 persons to design and operate its major financial and national information systems. The financial systems relating to cash receipts, postage meter settings, postal values and money orders record the transactions in more

than 8,000 post offices. These systems annually account for cash transactions of approximately \$4 billion and control the use of 117,000 postage meters, the sale of 1.4 billion stamps, and the issuance of 27 million money orders. National information systems provide information on mail volumes, marketing, service reliability performance, human resource utilization and personnel.

13.163 At the time of our review, the Post Office did not have a long-range plan that covered systems requirements and development and set out EDP goals and resource requirements. There was no formal basis for setting priorities for systems development. Furthermore, responsibility for ensuring that regular reviews of major computer systems were carried out was unclear, with the result that very few reviews had been conducted. This was also due in part to the lack of available resources.

13.164 A number of the information systems had been developed independently to meet the need for information on volumes, human resource utilization and operating results. Management has accepted that there is a need for an integrated system and a long-range EDP plan, and their development is being addressed in the IMPAC action plan.

13.165 *The Post Office should develop a long-term plan and strategy to meet requirements for management information and for related computer processing facilities.*

13.166 *The Post Office should ensure that all major EDP systems are periodically evaluated.*

13.167 **Internal audit.** Chapter 12 of our 1978 Report gave the results of a government-wide review of internal auditing. We identified the need for comprehensive internal auditing in government and established minimum criteria for the performance of such work. The Post Office internal audit function was included in the 1978 study. As part of our comprehensive audit, we followed up our 1978 findings and found that, although the Post Office had made some efforts to correct the weaknesses observed, further action is still required in the major areas noted below.

13.168 Following our 1978 review, the Post Office issued a new internal audit policy that outlined the reporting relationships within the Department. This policy provided clarification of the previous mandate but continued to restrict audit activities to financial management. The Post Office, in its IMPAC action plan, has a project for revising the mandate of internal audit to provide senior management with an appraisal of all aspects of Post Office activities. The revision of the mandate was deferred pending conversion to Crown corporation status.

13.169 Similarly, the Post Office had indicated its intention of implementing corrective action to overcome the weaknesses noted in the audit planning area. The planned revision to the audit policy provides evidence of this intention, but successful implementation is dependent on the commitment of senior management.

13.170 Our review of the expanded scope mandate for internal audit submitted to the President of the Corporation for approval indicates that if it is implemented senior management should be provided with appropriate information and advice. Also, a strengthened internal audit function should increase the extent to which this Office can rely on internal audit, thereby avoiding unnecessary duplication.

13.171 *The Post Office should adopt comprehensive internal audit.*

Information for Parliament

13.172 The Office of the Comptroller General has undertaken a project to revise the form and content of the Estimates and the Public Accounts. The Public Accounts Committee, in its report of 23 March 1979, recommended that "all Crown corporations, as defined in the Financial Administration Act, be included in the Estimates, whether or not an appropriation is requested, and a comprehensive overview of its activities be provided by each corporation". The following audit observations should be considered by the Government and the Post Office in decisions about the type of information and level of detail that will be provided to Parliament.

13.173 **Achievement of objectives.** The current Estimates set out the objective for the Post Office. This objective is reasonably specific from a financial point of view in that the Post Office is to provide postal services "without incurring subsidization from general taxation other than that required to cover losses specifically identified in relation to other government objectives". However, as reported earlier, until the Post Office has completed its identification of all "other government objectives" eligible for subsidization and the associated costs and revenues, it will not be in a position to demonstrate that it is providing postal services on a break-even basis.

13.174 Some information on the achievement of objectives is presented now in the Estimates in a supplementary table where revenue and costs are broken down by classes of mail. The usefulness of this type of information could be enhanced if other government objectives and the associated costs and revenues were identified in the Estimates. This has been done for the subsidy associated with the delivery of publication mailings.

13.175 The other aspect of the objective, "standard of service adequate to meet their (people of Canada) needs", has been defined by the Post Office in terms of speed, reliability and availability of postal services to the public. The Department has developed service standards in these areas. Disclosure of summary information on standards of service should be presented in the Estimates to help Members of Parliament understand this aspect of the objective. If this information were disclosed, information on achievement compared to the standards could also be provided.

13.176 Performance information. Moving the mail involves four basic activities: mail collection and delivery; mail distribution (transportation between post offices); mail processing; and marketing, including counter services. Each can be divided into a number of sub-activities or processes that are carried out at many locations across Canada. For example, the mail processing activity can be subdivided into manual and mechanical mail processing. To help Members of Parliament assess the need for the level of resources requested, the Estimates could show summary data on factors affecting the resource requirements for each activity or process. Examples would be data on projections of volumes of mail that can be sorted by mechanical means and of non-machineable mail, projections of productivity (output compared to input) and projections of efficiency (productivity compared to a standard).

13.177 A comparison of planned results for the Estimates year with forecast results for the current year would be useful in assessing the allocation of resources to the program. Explanations of variances between planned and actual results could then be presented in the Public Accounts or the Annual Report.

13.178 Supplementary information. Assumptions about the future environment of the Post Office that were used in developing its Estimates would also be useful information for Members of Parliament. Such assumptions include forecasts of demographic shifts and changes in mail volumes. Similarly, the Estimates could include summaries of cost-benefit studies of levels and means of providing service where the results of such studies have an impact on the level of resources requested in the Estimates.

13.179 Because of the size of the work force and the fact that salaries and wages are the largest expense incurred by the Post Office, Members of Parliament may be interested in information on salaries and wages and on the major collective bargaining agreements.

Summary of Recommendations and Department's Comments

Recommendations

Department's Comments

Program Effectiveness

13.48 The performance of all major services should be regularly measured, the results compared to established standards of service, and appropriate action taken when there are significant differences between actual and standard.

Our planning contemplates expansion of the present performance measurement program. These enhancements, after careful consideration of costs and benefits, will result in improved availability and quality of information, more meaningful analysis of the results and more effective action in cases of significant deviations from established standards.

13.51 Procedures should be instituted, where practical, to monitor adherence to national directives on service availability, assess their cost and revenue implications, and evaluate their continuing appropriateness.

Service availability is being monitored periodically through functional audits including continuous analysis of customer reaction. Canada Post plans for improvements in cost and revenue information will provide the basis for continuous and more effective analysis of service availability.

13.53 The Post Office should identify, to the extent practicable, all services that are in support of other government objectives and determine the costs and revenues reasonably attributable to them.

The Canada Post IMPAC Plan provides for the development and implementation of improved cost accounting systems including the identification of related costs/revenues of services in support of other government objectives. For the interim, Canada Post is looking at means of improving the information relative to product revenue and costs.

Recommendations

Department's Comments

Corporate Planning and Control

13.65 The Post Office should revise the planning process to:

- provide management with the environmental, resourcing, operational and other information it requires as input to its planning decision-making process;
- shorten the planning cycle so that decision points are closer to the start of the applicable fiscal year;
- permit better integration of business and financial planning; and
- permit adjustment to plans and budgets to reflect current environmental and operating conditions.

All of the suggested improvements identified with respect to the planning process are being addressed in the new planning system now in the process of implementation.

13.66 The Post Office should develop an appropriate cost accounting system.

The development of an appropriate cost accounting system is one of the major projects identified in the IMPAC Plan, Accounting Projects.

13.70 The monthly reporting process for the standard performance measures should be revised to ensure that the most appropriate and timely information is being presented, taking into consideration the need to give managers at all levels better information with which to determine trade-offs between performance goals and to assist them in making operational decisions.

The monthly reporting process to provide appropriate and timely information for standard performance measures is subject to continuous review.

Part of this review is the IMPAC - Cost Accounting Project which should assist decision-making in trade-offs between performance goals and resource allocation.

Recommendations

Department's Comments

Management of Mail Operations

13.87 The Post Office should ensure that appropriate operational planning and control procedures are in place in all plants and that roles and responsibilities in relation to these functions are clearly defined and communicated to all concerned.

Canada Post management has taken steps to ensure that in the largest mechanized plants Production Planning and Control systems (PP & C) are in place and operating. A corporate project plan has been developed to re-examine the approach to design and application of national PP & C systems including the smaller plants. This approach will include consideration of policy and procedures, organizational structure, roles and responsibilities, processing priorities and adequate staffing to meet service specifications.

13.90 Engineered work standards should be developed for all major mail processing functions and should be used to determine the extent to which productivity improvements can be achieved and to assist in staffing and production planning.

Engineered work standards are being developed for major mail processing functions. Upon completion of this developmental phase, these standards will be made available to operating groups in order to assist in staffing and production planning.

13.104 The Post Office should review its present procedures relating to the provision of letter carrier service with a view to increasing economy and efficiency.

Canada Post is presently engaged in an evaluation of the appropriateness and currency of the procedures related to all standards under the Letter Carrier Route Measurement System (LCRMS). Where applicable route structuring formulae will also be reviewed in concert with contractual agreements.

When this review is completed corrective action will take place as required.

The results of the overall evaluation will ensure that the LCRMS produces a fair and equitable measure of a day's work.

Recommendations

Department's Comments

13.110 The Post Office should ensure that it has appropriate measurement systems in place to monitor service performance for each of its major postal services.

The proposed NEPS External system will provide for a measuring system to monitor service performance for major postal services. This plan is now in the process of economic evaluation.

13.111 The Post Office should report publicly the mail performance of its major postal services at least annually.

The principle of public disclosure of mail performance results is a matter for continuing consideration and will be recommended to management of the Corporation.

13.125 For publicly reporting the quality of first class mail service, the Post Office testing procedures should be modified:

The Corporation's long-range plans provide for a program to improve mail testing. Specifically, the NEPS External plan designed to provide better testing of the quality of first class mail service using external organizations is being evaluated.

- to measure the performance of mail that is processed manually;
- to reflect the total mail handling process; and
- to include the variety of sizes of envelopes, methods of addressing, etc. used by the public.

13.126 For publicly reporting mail service performance on any of its postal services, the Post Office should specifically state the methods used in arriving at its test results.

If a decision is made in future to publicize test results, consideration will also be given to naming a contact who can provide information on the methods used in arriving at the test results.

Recommendations

Department's Comments

Payroll Costs Management

13.136 The Post Office should expand its efforts to evaluate systematically the effectiveness of its labour relations and communications programs.

It is the objective of Canada Post to ensure the commitment and dedication of its employees in attaining corporate goals. A number of strategies have been developed to achieve:

- (a) improvements in employee/management relations; and
- (b) expedient and complete exchange of information.

These activities will be systematically and consistently appraised.

13.139 Line managers should receive additional training to enable them to better carry out the labour relations responsibilities assigned to them.

Canada Post has plans and strategies identified as "Improvement of Middle Management and Supervisory Effectiveness". These address the topic of managers' training, including the aspect of labour relations. The full implementation of these plans should result in more effective labour relations.

13.145 Bargaining objectives for future negotiations should be established and strategies for achieving them should be developed.

As a Crown corporation, Canada Post will assume full responsibility over collective bargaining. It is recognized that long-term strategies and objectives for bargaining form a part of the total process and as such will be developed and included in this aspect of corporate responsibility.

13.149 Engineered work standards should, where applicable, be used as the basis for establishing human resource requirements and making human resource allocations.

Engineered work standards are being developed for major mail processing functions. Upon completion of this developmental phase, these standards will be made available for establishing resource requirements.

Recommendations

Department's Comments

13.151 The Post Office should implement procedures to forecast long-term shortages and surpluses in all major human resource groups and to develop action plans for dealing with them.

Canada Post's current career and succession planning strategies will enable the Corporation to forecast requirements and to develop action plans for human resourcing.

13.154 Responsibility should be assigned to a central group for developing an information system on available training programs and ensuring that, across the Post Office, training needs are identified and the effectiveness of training is evaluated.

The responsibility for all aspects of training will be included in the role of the Senior Personnel Executive of the Corporation.

Financial Controls, EDP and Internal Audit

13.160 The Post Office should establish appropriate accounting controls over money order liability accounts.

It is the opinion of Canada Post that sufficient accounting controls and system safeguards exist over money order operations and corresponding liability generated by money order sales. The aspect of reconciliation of money order and other subsidiary accounts to the General Ledger is being addressed by the National Reconciliation Procedures project. The full implementation of these procedures will strengthen the reconciliation process and ensure the propriety of General Ledger account totals.

13.165 The Post Office should develop a long-term plan and strategy to meet requirements for management information and for related computer processing facilities.

A long-term plan and strategy to meet requirements for management information and for related computer processing facilities have been included in the IMPAC Project and will be integrated in the corporate long-range plans for Canada Post Corporation.

Recommendations

Department's Comments

13.166 The Post Office should ensure that all major EDP systems are periodically evaluated.

Responsibility for this aspect will be included in the new corporate organization.

13.171 The Post Office should adopt comprehensive internal audit.

The policy statement designed to change the scope of Internal Audit to meet the requirements of the organization, together with the applicable proposed organization and audit plan, are ready and await the approval of the Board of Directors of Canada Post Corporation.

**OBSERVATIONS ON THE FINANCIAL STATEMENTS
AND OPERATIONS OF CROWN CORPORATIONS
AND OTHER ENTITIES**

OBSERVATIONS ON THE FINANCIAL STATEMENTS AND OPERATIONS OF CROWN CORPORATIONS AND OTHER ENTITIES

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OBSERVATIONS ON THE FINANCIAL STATEMENTS AND OPERATIONS OF CROWN CORPORATIONS AND OTHER ENTITIES

14.1 Introduction. This chapter elaborates on the more significant qualifications and other observations included in our audit reports on the annual financial statements of Crown corporations and other entities.

The Office audits and reports on the annual financial statements for 34 of the agency and proprietary Crown corporations listed in Schedules C and D to the Financial Administration Act (FAA). Audits of these corporations are carried out and reported on in accordance with the provisions of section 77 of the FAA, which includes the requirement that the auditor "...call attention to any other matter falling within the scope of his examination that in his opinion should be brought to the attention of Parliament."

The Office also audits and reports on the annual financial statements of 50 other separate entities. These include departmental Crown corporations listed in Schedule B to the FAA, boards, commissions, territorial governments and their agencies, separate funds and special accounts such as the Exchange Fund Account, the Canada Pension Plan Account and the Unemployment Insurance Account.

Our audit reports on current year financial statements include qualifications or other observations where we found:

- deficiencies or inconsistencies in the application of stated accounting policies;
- transactions that did not comply with Treasury Board guidelines; or
- significant transactions that were not within the statutory powers of a corporation.

14.2 Canada Employment and Immigration Commission - Benefit and Overpayment System. Paragraph 11.9 of our 1980 Report drew attention to weaknesses in the control of the Benefit and Overpayment System of the Unemployment Insurance Account. Our audit report to the Minister of Employment and Immigration on the financial statements of the Unemployment Insurance Account for the year ended 31 December 1980 disclosed that the Commission, in 1980, had continued its efforts to improve controls over benefit payments through the more extensive application of new systems and other procedures. However, the audit established that some benefits had been paid to claimants who were not entitled to them, and some claimants had not received the benefits to which they were entitled.

Modification or implementation of new systems for applying the Unemployment Insurance Act will take a number of years before results can be noted. During 1979, the Commission implemented and modified a number of significant systems and, in 1980, expanded their applications. As a result of these changes, we have modified our study, and a comparative estimate of overpayments and underpayments, relative to the detailed study of 1978, cannot be determined. For that year, the statistical sample included expanded procedures to verify the validity of information submitted to the Commission by employers. The results of that study indicated that the total amount of overpayments not previously identified by the Commission was estimated to be \$290 million; underpayments were estimated to be \$67 million.

However, based on the results of our modified study of claims paid in 1980, we established that overpayments and underpayments not previously identified by the Commission still exist. Also, the results of the study indicated again that, in a significant number of instances, the Commission did not adhere to all its administrative procedures in processing continuing benefit payments. This could have resulted in additional overpayments and underpayments.

During 1979 and 1980, the Commission implemented and expanded a number of significant systems that it believes will improve controls over the benefit and overpayment system. These include:

- a Decision Monitoring System designed to ensure that all initial claims and related decisions processed by regional computer centres have been authorized and approved by insurance agents, and properly recorded;
- a new Record of Employment form and system to reduce the incidence of errors in data supplied by employers; and
- a new Report on Hirings System which requests employers to supply the Commission, on a voluntary basis, with information on the hiring of new employees.

Also in 1980, the Quality Control and Quality Assurance System was modified. This system is designed to intercept and correct errors prior to input to the computer and to identify the source of recurring errors so that preventive action can be taken.

Our Office will continue to monitor the results of these changes and will conduct detailed studies of benefits paid to claimants to measure the effect of these changes.

14.3 Canada Pension Plan - Need to develop long-term financing arrangements. We first drew the attention of Parliament to the funding of the Canada Pension Plan in paragraph 17.6 of our 1977 annual Report.

When the Plan was established in 1965, it was recognized that the combined employer-employee contribution rate of 3.6 per cent would be sufficient

to meet expenses for benefits and administration only for a limited time and that a review of the financing arrangements would be required 10 to 15 years after beginning operation. In the initial years, the excess of contributions and interest income over benefits and expenses would result in the accumulation of funds which would be made available to the provinces. At 31 March 1981, the excess amounted to \$18.9 billion (\$16.8 billion in 1980).

Under the Canada Pension Plan legislation, the Chief Actuary of the Department of Insurance is required to prepare, at least once every five years, an actuarial report on the operation of the Act and the state of the Canada Pension Plan Account. The most recent report, tabled in the House of Commons on 18 December 1978, indicated that, if no changes were made to the combined employer-employee contribution rate of 3.6 per cent, the annual cost of benefits and expenses would, by the year 1985, exceed the amount of annual contributions. If the increase in the contribution rate were delayed beyond 1992, the Fund would start to decline and, by the year 2003, would be exhausted.

Agreement by the federal government and the provinces is required to alter the Plan's financing arrangements. When agreement to do so has been reached, it normally requires at least a two-year-and-one-day period of exposure to Parliament before coming into force. These requirements and the action being taken to address long-term financing arrangements are disclosed in the last two paragraphs of Note 3 to the financial statements:

While the Canada Pension Plan is administered by the Government of Canada, the Government does not have exclusive authority to effect changes to the Plan. Under existing legislation, any proposed enactment to alter the general level of benefits or the rate of contributions requires agreement by at least two-thirds of the ten provinces having an aggregate of not less than two-thirds of the population, and at least a two-year-and-one-day period of exposure to Parliament before coming into force. However, the exposure period to Parliament has been waived on two previous occasions when changes to the Plan have been enacted.

A long-term financing philosophy for the Plan which will include the timing and rate of increase of the contribution rate is being considered by the Provinces and the Federal Government.

The establishment of a long-term financing philosophy had its beginning in 1977 when a sub-committee of the federal-provincial Continuing Committee of Officials on Fiscal and Economic Matters was given the task of assessing the Plan's financing issues. The technical phase of this work has been completed. At the present time, the federal government and each of the ten provincial governments are proceeding with a policy development phase under which it is expected that each government will generate its own policy options. Once these options are developed, negotiations will begin between the federal government and the provinces. No firm target date, however, has been set for completing the policy development phase or for beginning the negotiation phase.

In our audit report to the Minister of National Health and Welfare on the statements of transactions of the Canada Pension Plan Account and the Canada Pension Plan Investment Fund for the year ended 31 March 1981, we drew attention to the major financial changes which were projected to take place by 1985, 1992 and 2003. We also pointed out that, because a change in the general level of benefits or in the rate of contributions requires agreement by the provinces and, unless waived, at least a two-year-and-one-day exposure to Parliament, a decision on long-term financing arrangements needs to be made in the near future.

14.4 The Exchange Fund Account - Valuation of gold holdings and the inclusion in income of net gains on the sale of gold. The Exchange Fund Account is an account in the name of the Minister of Finance, governed by the Currency and Exchange Act and administered by the Bank of Canada, to aid in the control and protection of the external value of the Canadian dollar.

The accounting treatment given to two matters, although in accordance with the Exchange Fund Account stated accounting policies, in our opinion, is not in accordance with section 16 of the Currency and Exchange Act.

The two matters are:

- Gold holdings of 20,982 thousand fine ounces at 31 December 1980 and carried at approximate historical cost (U.S. \$44.64) and not adjusted to commodity market value (U.S. \$589.90). As a result, income does not include unrealized valuation gains equal to the difference between commodity market values and approximate historical costs.
- Realized net gains on sales of gold (\$800.8 million in 1980) are recorded as valuation gains, taken into income in equal amounts over a three-year period, and paid over to the Consolidated Revenue Fund (CRF) over a three-year period. These realized net gains should be entirely taken into income of the year, and paid over to CRF within three months after the end of the year.

Our audit report to the Minister of Finance for the year ended 31 December 1980 disclosed these matters as items that should be brought to the attention of Parliament. Officials of the Department of Finance have indicated that they will propose amendments to the Currency and Exchange Act to provide explicit authority for the accounting treatment currently being followed by the Exchange Fund Account.

14.5 National Capital Commission - Improper disclosure of unexpended balances of parliamentary appropriations. Paragraph 11.17 of our 1980 Report disclosed the retention of the unexpended balances of appropriation.

In the year ended 31 March 1981, the National Capital Commission received an amount of \$35.9 million (1980 - \$31.6 million) under the authority of

Vote 45 in respect of net operating expenditures. Of this amount, \$2.9 million (1980 - \$2.6 million) was not expended by the Commission at 31 March 1981, and it is our opinion that it should be shown as a current liability at that date and returned to the Consolidated Revenue Fund (CRF). Prior to 1980, the unexpended balances were returned by the Commission to the CRF. The Commission, on the basis of legal advice from the Department of Justice, has retained the \$2.9 million to finance future years' expenditures and has disclosed this amount as a component of the Equity of Canada under the heading "General Fund".

The effect on the Commission's financial statements of not recording the unexpended balances as amounts owing to Canada is an understatement of the current liabilities and the working capital deficiency of \$5.5 million at 31 March 1981 (1980 - \$2.6 million) and an overstatement of the Equity of Canada of \$5.5 million, as well as an improper disclosure of a liability under the Equity of Canada.

Our view is that any appropriation received during a fiscal year should only be used for operating expenditures during that year; any excess of amounts received over amounts expended should lapse in accordance with the Financial Administration Act and be returned to the CRF in the following year. We believe that this position is consistent with the intention of Parliament as reflected in the wording of Vote 45 in 1980-81. Furthermore, parliamentary control is lost if the annual appropriation received by the Commission in a particular year is used to finance expenditures of a future year in excess of the amounts approved by Parliament for that year.

During 1980-81, the Commission used the unexpended balance of the 1979-80 appropriation of \$2.6 million to repay loans from Canada as directed by the Treasury Board. In our view, these funds should have been used to repay lapsed funds.

In our audit report to the Minister of Public Works, our opinion on the financial statements of the Commission for the year ended 31 March 1981 was qualified accordingly.

14.6 Royal Canadian Mint - Commercial practices inconsistent with government policy and guidelines. In our audit of the Royal Canadian Mint for the year ended 31 December 1980, we noted that the Corporation had entered into agreements with foreign distributors for the promotion and sale of Canadian numismatic coins. Our examination revealed that the Corporation had, after 31 December 1980 as well as in prior years, engaged in the business practice of discharging certain of its debts by making payments to third parties in Switzerland and Belgium on account of one of the Corporation's foreign distributors. In accordance with written instructions from one foreign distributor, pursuant to an agreement to share advertising and promotional expenses incurred by him, the Corporation made payments totalling approximately \$58,000 over a period of three years to third parties in countries other than that of the foreign distributor's place of business.

In December 1976, the President of the Treasury Board stated in the House of Commons the Government policy and guidelines on the standards of business conduct and commercial practices expected of Crown corporations in international trade.

In June 1981, we informed the Board of Directors and senior officers of the Mint that, in our opinion, these practices were inconsistent with the intent of the Government policy and guidelines relating to commercial practices of Crown corporations as announced in the House of Commons in December 1976.

In October 1981, in view of the concern expressed by our Office, the Board of Directors directed management to discontinue these practices. Nothing came to our attention during the course of our examination to indicate financial impropriety for personal gain by members of the Corporation. This Office will continue to monitor this matter.

As required by section 77(1) of the Financial Administration Act and recommendations of the Public Accounts Committee, we made reference to this matter in our report to the Minister of Supply and Services on the examination of the Corporation's accounts for 31 December 1980.

14.7 Entities included in Volume I of the Public Accounts. Financial statements for the following entities, together with our audit reports on them, are included in Volume I of the Public Accounts under the following sections:

Section 7

Canada Pension Plan Account
Canada Pension Plan Investment Fund
Government Annuities Account
Royal Canadian Mounted Police (Dependants) Pension Fund
Unemployment Insurance Account

Section 9

Exchange Fund Account

14.8 Entities included in Volume II of the Public Accounts. Financial statements for the following entities, together with our audit reports on them, appear in Volume II of the Public Accounts under the heading of their related departments:

Agriculture

Agricultural Products Board
Agricultural Stabilization Board

Communications

Canada Council
National Arts Centre Corporation
National Film Board
National Museums of Canada
Social Sciences and Humanities Research Council

External Affairs

International Development Research Centre

Industry, Trade and Commerce

Standards Council of Canada

Labour

Canadian Centre for Occupational Health and Safety

National Health and Welfare

Medical Research Council

Privy Council

Board of Trustees of the Queen Elizabeth II Canadian Fund
to Aid in Research on the Diseases of Children
Economic Council of Canada

Science and Technology

Natural Sciences and Engineering Research Council
Science Council of Canada

14.9 Crown corporations included in Volume III of the Public Accounts.
Financial statements for the following Crown corporations, together with our audit reports on them, are included in Volume III of the Public Accounts.

Atlantic Pilotage Authority
Atomic Energy of Canada Limited
Canada Deposit Insurance Corporation
Canadian Arsenals Limited
Canadian Broadcasting Corporation
Canadian Commercial Corporation
Canadian Dairy Commission
Canadian Film Development Corporation
Canadian Livestock Feed Board
Canadian National (West Indies) Steamships, Limited
Canadian Patents and Development Limited

Canadian Saltfish Corporation
Crown Assets Disposal Corporation
Defence Construction (1951) Limited
Eldorado Aviation Limited
Eldorado Nuclear Limited
Export Development Corporation
Farm Credit Corporation
Freshwater Fish Marketing Corporation
Great Lakes Pilotage Authority, Ltd.
The Jacques Cartier and Champlain Bridges Incorporated
Laurentian Pilotage Authority
Loto Canada Inc.
National Battlefields Commission
National Capital Commission
National Harbours Board
Northern Canada Power Commission
Northern Transportation Company Limited
Pacific Pilotage Authority
Royal Canadian Mint
The St. Lawrence Seaway Authority
The Seaway International Bridge Corporation, Ltd.
Teleglobe Canada
Uranium Canada Limited

14.10 Entities excluded from the Public Accounts. We also report on the financial statements of the following entities which do not appear in the Public Accounts:

Airports Revolving Fund
Army Benevolent Fund
Canadian Army Welfare Fund
Canadian Broadcasting Corporation Pension Board of Trustees
Canadian Forces Personnel Assistance Fund
Canadian Grain Commission
Compensation Fund (Yukon Territory)
Eldor Resources Limited
Fisheries Prices Support Board
Government of the Northwest Territories
Government of the Yukon Territory
Grimshaw Trucking and Distributing Ltd.
International Fisheries Commissions Pension Society
Northern Pipeline Agency
Northern Transportation Pension Plan
Northwest Atlantic Fisheries Organization
Northwest Territories Housing Corporation
Northwest Territories Liquor Control System
Northwest Territories Workers' Compensation Board
Parliamentary Restaurant
Pinawa General Hospital
Post Office Guarantee Fund

Public Works Lands Company Limited
Royal Canadian Air Force Benevolent Fund
Royal Canadian Mounted Police Benefit Trust Fund
Royal Canadian Mounted Police Fine Fund
Royal Canadian Naval Benevolent Fund
Yukon Housing Corporation
Yukon Liquor Corporation

**OBSERVATIONS REPORTED UNDER
SECTIONS 7 AND 11 OF THE
AUDITOR GENERAL ACT**

OBSERVATIONS REPORTED UNDER SECTIONS 7 AND 11 OF THE AUDITOR GENERAL ACT

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OBSERVATIONS REPORTED UNDER SECTIONS 7 AND 11 OF THE AUDITOR GENERAL ACT

Introduction

15.1 This chapter reports on three types of matters:

- observations under section 7 of the Auditor General Act on matters raised in previous annual Reports that have not been adequately dealt with by the Government;
- observations under section 7 of the Auditor General Act on matters raised for the first time that are not included elsewhere in this Report; and
- a report under section 11 of the Auditor General Act on our continuing review of the Oil Import Compensation Program.

Observations Under Section 7 on Matters Raised in Previous Reports

15.2 **Department of Secretary of State - Failure to remedy previously reported inadequacies in controls over the Canada Student Loans Program.** We have repeatedly brought to the attention of both management and Parliament serious inadequacies in controls over the Canada Student Loans Program. Little or no corrective action has been taken. We commented on this Program in our annual Reports of 1972 (pages 217 and 218), 1975 (pages 196 and 197) and 1977 (pages 48 through 50).

The purpose of the Canada Student Loans Program is to make financial help available to students who require assistance to carry on full-time studies at the post-secondary level of education. Under the Program, the Federal Government guarantees loans made by approved lending institutions and pays interest to them during an "interest-free" period. Loans are "interest-free" to the student during the period of full-time studies and a period of six months thereafter. Beginning with the seventh month after cessation of full-time studies, the student becomes liable for interest and must start repaying the loan.

Inadequacies in controls over the Canada Student Loans Program include among others:

- no procedures to reconcile detailed records of loans outstanding with appropriate control totals to help ensure that interest payments to approved lenders are made only as required by the Program;
- average delays of 3 months and, in certain cases, up to 12 months between the time a loan is reported delinquent by the

lending institution and the time collection action is initiated by collection agencies;

- inadequate procedures to monitor and assess the performance of collection agencies;
- insufficient controls over the data processing function to ensure that all data processed are authorized, complete and accurate; and
- no provision for off-site storage of duplicate computer files and programs to guard against loss of data in the event of destruction of original records.

In our view, it is unacceptable that an operation the size of the Canada Student Loans Program should continue to have such inadequate control procedures. Loans outstanding under the Program have grown from approximately \$570 million in 1976 to approximately \$765 million in 1981. Since inception of the Program in 1964, lending institutions have requested payment from the Government for approximately 93,000 defaulted loans amounting to some \$173 million. The Department has advised us that systems and procedures for management of this Program will be revised by April 1983.

15.3 Acquisition of Radio Engineering Products Limited as satisfaction for debts to the Crown. Our 1972 Report (paragraph 101) described the circumstances which led to the acquisition of Radio Engineering Products Limited in 1972 as satisfaction for debts of \$4.3 million due to the Crown. The Standing Committee on Public Accounts has asked us to report each year on the results of this transaction.

In our 1978 Report (paragraph 22.15), we summarized events which led the Company to file a voluntary declaration of bankruptcy in 1975. In our 1980 Report (paragraph 12.4), we noted that \$503,000 was on deposit with the Trustee in Bankruptcy at 31 March 1980. The Trustee has informed us that he had \$564,954 on deposit at 31 March 1981.

Distribution of trust moneys to the Crown has been delayed pending the outcome of litigation involving a claim by the Company against two of its senior officers and a counter claim by the senior officers. The initial court hearing for this litigation has been set for 15 February 1982.

Observations Under Section 7 on Matters Raised for the First Time

15.4 Department of Indian Affairs and Northern Development - Questionable safeguards over the release of Indian capital moneys. The Department of Indian Affairs and Northern Development is responsible for managing "Indian moneys", defined as all moneys collected, received or held by Her Majesty for the use and benefit of Indians or bands. The Indian Band Funds are held in the Consolidated Revenue Fund and administered in accordance with the Indian Act (R.S.C., 1970, c. I-6). Each of these Funds is divided into two accounts -- a

capital account and a revenue account. Section 64 of the Indian Act provides that the Minister may, with the consent of the council of a band, authorize expenditures from Indian capital moneys for a number of specific purposes, and "...for any other purpose that in the opinion of the Minister is for the benefit of the band."

During the year, the Department authorized payment of \$12 million to a band council from the band's Capital Fund to be placed in interest-bearing trust accounts. We found no evidence of written authorization by the Minister or criteria used for the decision.

The Minister approved payment from band Capital Funds of \$35 million to another band council for the purpose of "... forming a Band-owned Trust Company". Our examination showed that only \$8 million of this amount had been used for the purpose approved by the Minister. The balance was placed by the band council with a trustee appointed by the council, who invested \$18 million in short-term deposits and \$9 million in a commercial joint venture involving the band council and a public company. Because the trust company is governed by the federal Trust Companies Act, only the \$8 million has the investment risk safeguards afforded by that Act. The remaining \$27 million was not expended by the council for the purpose authorized by the Minister. The Department advises us that it is working with the band council to correct the situation.

15.5 Department of Public Works - Building acquired in 1976 and not used. In 1976, the Department of Public Works paid \$1.98 million for a partially completed building in the National Capital Region, mainly to provide space for the National Museums of Canada. The purchase price for this 120,000 square foot building included 5 acres of land.

The building has remained vacant because of delays in preparing it for occupancy. These delays resulted from changes in plans by the National Museums and the Department of Public Works.

The Department has advised us that final construction and preparation for occupancy will not likely be completed before 1983.

15.6 Department of Transport - Double benefits to Canadian National resulting from failure to consider all significant financial implications of new legislation. When amendments to the Canadian National Railways Capital Revision Act came into force on 1 January 1978, Canadian National (CN) continued to claim reimbursement, under the Railway Act, from the Canadian Transport Commission (CTC) of approximately \$150 million for certain prior years' losses. As explained below, this amount had already been paid to CN by the Department of Transport in reimbursing CN's annual deficits. Moreover, subsequent to 1 January 1978, CN has also claimed substantial income tax benefits through application of prior years' losses, although its deficits were fully reimbursed by the Government.

In our view, all the significant financial implications of these matters should have been fully considered and disclosed by the responsible departments to

the Ministers of Transport and Finance during the drafting of amendments to the Canadian National Railways Capital Revision Act. The Guidance Manual for the Preparation and Handling of Cabinet Papers issued by the Privy Council Office reflects the expectation of ministers that when an entity submits a proposal to ministers (such as for new legislation), it should consider all relevant factors, fully disclose the impact of the proposal, financial or otherwise, consult other government departments and agencies affected and summarize their views in the proposal.

Payments to Canadian National

From 1933 to 1977, annual appropriation acts allowed the Department of Transport to reimburse CN for its annual deficits. In addition, from 1971, the Railway Act allowed the CTC to reimburse CN for losses incurred in operating certain branch lines and passenger services provided as an imposed public duty. These losses were included in CN's annual deficits. Double payment was not an issue prior to 1 January 1978 because amounts paid by the CTC under the Railway Act reduced CN's annual deficits in the year of the CTC's payment, which in turn decreased amounts paid by the Department of Transport under annual appropriation acts.

On 1 January 1978, amendments to the Canadian National Railways Capital Revision Act came into force. The amendments included provision that future deficits of CN would not be reimbursed by the Government, nor would retained earnings become owing to the Receiver General as in the past. We were advised by the CTC that approximately \$150 million claimed by CN under the Railway Act for reimbursement of losses incurred prior to 1975 had not been paid to CN at 1 January 1978 and was not included in the Company's reported financial results.

The change in the Act created a situation in which the CTC payments made after the amendments came into force resulted in what the President of CN, in his 1980 annual report to shareholders, referred to as a "windfall". At that time, the Department of Transport did not advise the CTC of these amendments, and the CTC did not consider whether it should stop payments in respect of the \$150 million claimed by CN. Transport officials have stated that, in their opinion, the Department had no way of knowing at that time whether such claims were being processed at the CTC or the amount of such claims outstanding at 1 January 1978.

In 1980, the CTC recognized that CN was being reimbursed twice for losses incurred: first when the deficits that included these losses were reimbursed by the Department of Transport under annual appropriation acts; second when payments were made by the CTC under the Railway Act in 1978, 1979 and 1980. The CTC estimates that these double payments amounted to \$53 million. The CTC took action to stop further payments in respect of these losses and is now attempting to assess the validity of the remaining claims, in consultation with the Department of Transport. The Deputy Minister of Transport concurred with the President of the CTC that steps be taken to resolve the matter; the President of the CTC has written to the President of CN.

We have been advised by the Department of Transport that the Government is formulating a position with respect to the \$53 million already paid to CN and the remaining outstanding claims of approximately \$97 million. We recommend that this matter be resolved by the responsible Ministers.

Income Tax Benefits

CN's financial statements indicate that the Corporation has claimed a reduction in income taxes otherwise due for 1978, 1979 and 1980 as a result of reducing taxable income for those years by applying losses from prior years. Part or all of these losses relate to periods prior to 1 January 1978 when the Company's deficits were fully reimbursed by the Department of Transport under annual appropriation acts. It appears that CN's ability to reduce its taxable income in this manner has provided a financial benefit to the Company which was not fully analysed and disclosed to the appropriate Ministers at the time of drafting amendments to the Canadian National Railways Capital Revision Act.

We recommend that the Departments of Transport and Finance obtain the information necessary to determine whether, and to what extent, it is appropriate for CN to enjoy currently financial benefits which originate from periods prior to 1 January 1978 when the Company's deficits were reimbursed by the Government. This matter should be resolved on a basis consistent with the intention of Parliament in amending the Canadian National Railways Capital Revision Act.

15.7 Department of Transport - Loss of revenue to Canada from delay in renewing concession at Toronto International Airport. For the past two and one-half years, the Government of Canada's share of revenue from the duty-free shop concession at Toronto International Airport has been paid to the Government in accordance with the terms of a lease which expired on 30 April 1979, even though proposals in response to call for tenders for a new lease were received that would provide substantially more revenue. Since May 1979, the concession has been operated by the previous lessee under the terms of the expired lease.

The lease for the duty-free shop concession is authorized by the Governor in Council on recommendation of the Treasury Board and managed by the Department of Transport. Transport officials informed us that tenders for a new lease were called in May 1979. In October 1979, the Department of Transport's Evaluation Committee examining the tenders recommended that the lease be granted to the highest bidder.

We have been advised by the Department of Transport that since the highest bidder was a foreign company, an application was made by the company to the Foreign Investment Review Agency (FIRA) to operate the duty-free shop concession. The Department of Transport has also advised us that FIRA refused the application but that the company subsequently re-applied. The Department has further advised us that the lease was not awarded to the second highest bidder because it was expected that FIRA would accept the re-application of the foreign company. This would have resulted in a significant increase in concession revenue to Canada.

The Department of Transport requested but did not obtain Treasury Board approval for interim arrangements with the existing concessionaire which would have reduced the revenue loss to Canada. In April 1981, the President of the Treasury Board, in a letter to the Minister of Transport, estimated that the loss of revenue to Canada had amounted to at least \$5 million. At the same time he wrote to the Minister responsible for FIRA urging, on behalf of Treasury Board Ministers, that the case then before FIRA be brought before Cabinet as soon as possible. Information from the Department indicates that, irrespective of a decision between the proposals of the highest or second highest bidder, the minimum revenue loss will be approximately \$225,000 per month until this issue is resolved.

Our review of financial controls over the operation of the duty-free shop concession at the Toronto airport has indicated the need for a more detailed audit examination. We have brought this matter to the attention of the Department of Transport and have been advised by the Department that its internal audit staff will review the operations of the Department's airport concessions.

We intend to continue our review of the matters included in this observation.

15.8 Overexpended appropriations. For the year ended 31 March 1981, 12 of 31 government departments reported overexpended appropriations. The total amount reported as overexpended was approximately \$55 million and is presented on the Government's 1981 Statement of Use of Appropriations which forms part of the Audited Financial Statements of the Government of Canada reproduced in Appendix D of this Report. Details by department are provided in Volume II of the 1981 Public Accounts of Canada. As explained in the following paragraphs, the basis of charging amounts to appropriations was changed in 1980.

Prior to 1980, charges to appropriations on which Parliament had imposed an annual ceiling were recorded in the accounts of Canada and reported in the Public Accounts in accordance with section 30 of the Financial Administration Act (FAA). Section 30 provides that, at the end of the Government's fiscal year, any unused portion of such appropriations will lapse, except for certain payments that may be made in the 30-day period following the end of that year. These payments must be for the purpose of discharging debts payable for work performed, goods received or services rendered before the end of the year, or be payable before the end of the year under any other contractual arrangement entered into by the Government. Accounts payable were recorded at the year end for payments made in the 30-day period.

In 1980, in response to recommendations 24 and 39 of the Government's 1975 Report on the Study of the Accounts of Canada, the Government introduced a change in accounting policy for recording accounts payable at the year end. The acronym commonly used for this policy is PAYE. PAYE required departments to charge to appropriations on which Parliament has imposed an annual ceiling all debts incurred prior to the end of the year for work performed, goods received, services rendered or resulting from contractual arrangements, even though payment of such amounts was not made within the 30-day period following the end of the year. The intent of PAYE, and of

recommendations 24 and 39 of the Government's Study, was to provide a more complete reporting of the use of annual appropriations. In prior years, amounts payable that were paid after the 30-day period specified in section 30 of the FAA were listed by department at the back of Volume I of the Public Accounts but were not recorded in the accounts of Canada.

The Report on the Study of the Accounts of Canada recognized that amendments to the FAA would be required to fully implement recommendation 24. The requirement to do so was included in this recommendation. In our Observations in Section 3 of Volume I of the 1980 Public Accounts, we drew attention to the need to amend the FAA to clarify the legal authority for PAYE. At that time, we were advised by the Office of the Comptroller General that amendments would be sought in the coming year. The FAA has not yet been amended.

Report Under Section 11 on Our Continuing Review of the Oil Import Compensation Program

15.9 Introduction. In 1974, at the request of the Governor in Council, we undertook a continuing inquiry under section 62 of the Financial Administration Act into the administration of expenditures of the Oil Import Compensation Program.

The Oil Import Compensation Program is administered by the Petroleum Compensation Board within the Department of Energy, Mines and Resources. Under the Program, importers of crude oil and petroleum products are compensated so that the Canadian economy is cushioned from the impact of the large and rapid increases in the price of imported crude oil used in Canada.

15.10 Summary of transactions. A summary of appropriations and expenditures for the eight years to 31 March 1981 under the Oil Import Compensation Program is as follows:

<u>Fiscal Year</u>	<u>Appropriations</u> (thousands of dollars)	<u>Expenditures</u>
1973-74	\$ 240,000	\$ 157,000
1974-75	1,165,000	1,162,000
1975-76	1,685,000	1,582,000
1976-77	1,410,000	945,000
1977-78	925,000	925,000
1978-79	631,000	628,000
1979-80	1,800,000	1,633,000
1980-81	<u>3,162,000</u>	<u>3,162,000</u>
	<u>\$ 11,018,000</u>	\$ 10,194,000
Recoveries of prior years' expenditures		<u>69,000</u>
		<u>\$ 10,125,000</u>

During the fiscal year ended 31 March 1981, world prices of oil continued to increase at a faster rate than domestic prices. As a result, the rate of compensation paid to importers increased significantly again, and compensation payments increased by more than \$1.5 billion over the previous year. Volumes imported decreased by a small amount, but had a negligible effect on total compensation paid.

15.11 Petroleum Compensation Revolving Fund. Section 65.12(1) of the Petroleum Administration Act (S.C. 1974-75-76, c. 47) provides legislative authority for the imposition of a levy on domestic and foreign petroleum as well as on foreign petroleum products that have been processed, consumed or sold in Canada. Section 65.1 stipulates that the proceeds from the levy be for the sole purpose of assisting in meeting the cost of paying compensation on designated high-cost domestic petroleum, as authorized in section 72(4) of the Act. Domestic synthetic crude has been designated as high-cost petroleum.

For administrative purposes, the levy under section 65.12(1) and compensation payments under section 72(4) are handled separately in the Petroleum Compensation Revolving Fund.

A summary of the operations of the Fund since its beginning is presented in the following table. The figures for 1979 and 1980 are shown on a cash basis rather than on an accrual basis as in previous Reports.

<u>Fiscal Year</u>	<u>Levy</u> (thousands of dollars)	<u>Expenditures</u>
1978-79 (9 months)	\$ 66,000	\$ 20,000
1979-80	389,000	378,000
1980-81	1,393,000	915,000

The substantial increase in levy revenue during 1980-81 resulted from a series of levy rate increases during the fiscal year (12 July 1980 - \$4.72 per cubic metre; 1 November 1980 - \$5.03 per cubic metre; and 1 January 1981 - \$15.73 per cubic metre) that brought the rate from a level of \$6.29 per cubic metre at 31 March 1980 to \$31.77 per cubic metre at 31 March 1981. These increases were outlined in the Notice of Ways and Means Motion to amend the Petroleum Administration Act that accompanied the Budget of 28 October 1980.

The levy rate increases are not intended to provide revenue solely to assist in the payment of compensation on designated high-cost domestic petroleum, as required by section 65.1 of the Petroleum Administration Act. The discussion draft of the Energy Security Act, 1981, presented to Parliament by the Minister of Energy, Mines and Resources, notes that under the Energy Administration Act (the new name for the Petroleum Administration Act), section 65.1 is to be repealed. This will permit proceeds from the levy to be used to assist in meeting the cost of making other petroleum compensation payments under the Energy Administration Act. It is because of these circumstances that levy revenue exceeded expenditures by \$478 million in 1980-81.

The increase in expenditures during 1980-81 resulted in part from the compensation rate increases noted earlier and in part from the increased volumes of domestic synthetic crude being consumed.

15.12 Audit scope. Our examination of the administration of expenditures of the Oil Import Compensation Program and of the operations of the Petroleum Compensation Revolving Fund was made in accordance with generally accepted auditing standards and, accordingly, included such tests and other procedures as we considered necessary in the circumstances, except as explained in the following paragraphs.

The Petroleum Compensation Board, by virtue of its policy and program regulations, has recognized the need to have some audit work performed on all claims submitted for compensation and on all petroleum production levy payments received. Accordingly, the Board has made arrangements with independent auditors, generally the claimants' shareholders' auditors, to confirm that the supporting documentation provided to the Board agrees with documentation recorded in the records of the claimants and to conduct certain other specific tests. The Board's staff performs similar audits on claims of small importers and on claims under the high-cost domestic petroleum program. The petroleum levy, on the other hand, is audited by the audit staff of the Department of National Revenue - Customs and Excise, pursuant to an Order in Council under section 5(3) of the Energy Supplies Emergency Act (S.C. 1973-74, c. 52).

At the time of our examination, the Board had not received from the claimants' auditors all reports relating to amounts of compensation paid to 31 March 1981. Because of this, until we review the outstanding reports, we will not be able to fully satisfy ourselves as to the validity of the information reported by the claimants to the Board. Our review of reports received during the year, which were not available for examination and reporting in 1980, disclosed no significant discrepancies.

At 31 August 1981, the following amounts of compensation had not been reported on by the claimants' auditors:

<u>Fiscal Year</u>	Total Compensation Payments (thousands of dollars)	Compensation Paid but not Reported Upon	Percentage Not Reported Upon
1979-80	\$ 1,633,000	\$ 343,000	21.0%
1980-81	<u>3,162,000</u>	<u>3,150,000</u>	99.6%
	<u>\$ 4,795,000</u>	<u>\$ 3,493,000</u>	

15.13 Conclusion. In our opinion, except for any significant discrepancies that may be determined when outstanding reports from claimants' auditors are received, payments in the fiscal year ended 31 March 1981 have been properly processed and are in conformity with applicable legislation, regulations and guidelines.

15.14 Outstanding litigation. Our 1980 Report noted the legal action undertaken by an importer to reverse a \$1.9 million recovery by the Board of excessive freight compensation. Our follow-up on this matter disclosed that the legal action is continuing.

15.15 Matter previously reported on and now resolved. In our 1980 Report, it was pointed out that importing companies must refund compensation on imported oil which is subsequently exported. We noted one case where, in our view, the method used by an importer to deduct exports resulted in excessive compensation of \$3.7 million. The Board did not concur with our view and referred the matter to the Department of Justice for an opinion.

The Department of Justice has since given an opinion that supports our view, and the Board has recovered the excess compensation.

ORGANIZATION AND PROGRAMS OF THE OFFICE OF THE AUDITOR GENERAL

ORGANIZATION AND PROGRAMS OF THE OFFICE OF THE AUDITOR GENERAL

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ORGANIZATION AND PROGRAMS OF THE OFFICE OF THE AUDITOR GENERAL

16.1 The responsibilities of the Auditor General are set out in the Auditor General Act of 1977, reproduced as Appendix A to this Report. Four sections in the Act detail the Auditor General's responsibility to report to Parliament.

- *Section 6* requires the Auditor General to express an opinion on the financial statements of the Government of Canada.

- *Section 7* requires the Auditor General to report annually to the House of Commons anything that he considers to be of significance and of a nature that should be brought to its attention, including cases where public funds have been expended without due regard to economy or efficiency, or where procedures have not been established to measure and report the effectiveness of programs, where such procedures could appropriately and reasonably be implemented.

- *Section 8* enables the Auditor General to make a special report to the House of Commons on any matter of pressing importance or urgency that, in his opinion, should not be deferred until his annual Report is tabled.

- *Section 11* permits the Auditor General to inquire into and report on matters in response to requests from the Governor in Council. Under this section, the Office continued its examination of the Oil Import Compensation Program, referred to in Chapter 15 of this Report.

16.2 The Auditor General is also required to express an opinion, as either the auditor or joint auditor, on the accounts of 34 agency and proprietary Crown corporations, in accordance with section 77 of the Financial Administration Act, and 50 departmental Crown corporations and other entities, including the accounts of the Governments of the Yukon Territory and Northwest Territories and their agencies. As well, the Auditor General is the external auditor of a number of international organizations, including the International Civil Aviation Organization.

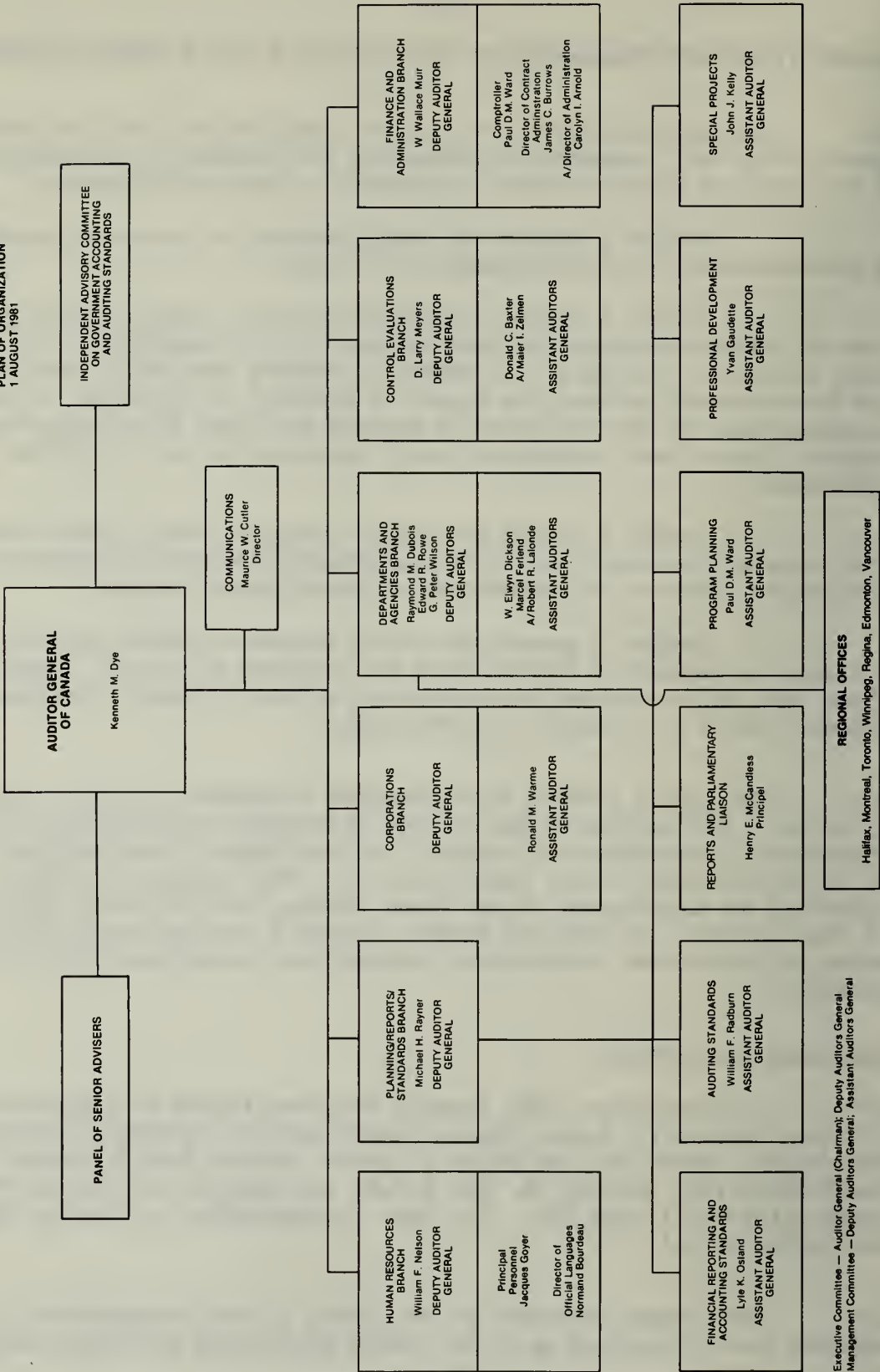
Organization of the Office

16.3 On 12 September 1980, James J. Macdonell retired as Auditor General of Canada. Michael H. Rayner, Deputy Auditor General, Planning/Reports/Standards Branch, carried out the duties of Auditor General from September 1980 through March 1981. Kenneth M. Dye, F.C.A. was appointed Auditor General of Canada, effective 1 April 1981. The plan of organization at 1 August 1981 is shown in Exhibit 16.1.

16.4 The overall direction of the Office is the responsibility of the Executive Committee, made up of the Auditor General and the Deputy Auditors

Exhibit 16.1

OFFICE OF THE AUDITOR GENERAL
PLAN OF ORGANIZATION
1 AUGUST 1981



General and chaired by the Auditor General. The Management Committee is made up of the Deputy Auditors General and the Assistant Auditors General and co-ordinates professional matters and audit programs, assisting the decision-making of the Auditor General and the Executive Committee.

16.5 The Departments and Agencies Branch employs approximately 250 professional staff who plan, conduct and report the comprehensive and financial audits of departments, agencies and certain Crown corporations. The Branch is responsible for following up audit recommendations made in previous Reports. Regional offices in Halifax, Montreal, Toronto, Winnipeg, Regina, Edmonton and Vancouver report to the Departments and Agencies Branch. Audits of government organizations with headquarters in regional centres or which administer major portions of their programs in the regions are undertaken by these offices.

16.6 The Corporations Branch is responsible for developing comprehensive audit methodology for Crown corporations. The Office is currently working with a "laboratory group" of Crown corporations, and the experience acquired with this group will assist in developing the Office's approach to comprehensive auditing of Crown corporations generally.

16.7 The Corporations Branch has primary responsibility for co-ordinating the Office's relationship with the external auditors of those Crown corporations for which the Auditor General is not the designated auditor. As auditor of the Accounts of Canada, the Auditor General relies on the work of other auditors.

16.8 The Control Evaluations Branch provides professional support to comprehensive audit teams in the areas of management systems and electronic data processing controls. The Branch also plans and conducts government-wide and special studies in these areas and plays a leading role in comprehensive auditing methodology development.

16.9 The Branch consists of three groups. One group is responsible for providing advice and assistance to teams auditing organizations' procedures for measuring and reporting effectiveness; a second, dealing with management systems, conducts government-wide reviews or audits of management systems and processes with emphasis on economy and efficiency. This group also supplies professional support to comprehensive audit teams. The third group, Computer Audit Services, provides expertise and methodology in the areas of value-for-money assessments of EDP expenditures and financial control assessments in computerized systems, and the facility for analysing information held on computer files through the use of specially created audit software. In addition, sampling specialists assist in the design and analysis of sampling plans.

16.10 The Planning/Reports/Standards Branch, which consists of six groups, is concerned with comprehensive auditing standards and a number of professional

activities that support the quality of audit operations. A major responsibility is co-ordinating the preparation of the annual Report to the House of Commons and maintaining liaison with the Standing Committee on Public Accounts, Members of Parliament, central agencies of government and the Office's legal advisers.

16.11 The Financial Reporting and Accounting Standards group co-ordinates the audit examination of the accounts and financial statements of the Government of Canada. It recommends to the Auditor General the audit opinion and observations on the main financial statements of Canada and on changes in the principles and practices that are proposed from time to time by government and by the Canadian Institute of Chartered Accountants. It provides review and advice to audit teams concerning financial disclosure and accounting principles for Crown corporations and government agencies. The group is also responsible for carrying out audits of certain central agencies of government and is involved in the project to reform the Estimates and Public Accounts being conducted by the Office of the Comptroller General.

16.12 The Auditing Standards/Methodology/Research group is responsible for developing and maintaining auditing standards, managing auditing methodology development and conducting auditing research. Standards and procedures are assessed through post-audit quality review, with resulting changes communicated by Accounting and Auditing Bulletins and revisions to the *Comprehensive Auditing Manual*. Methodology is made available to staff through Audit Guides and Bulletins to assist them in carrying out audits. Research in auditing is conducted to develop ways of improving audits and to ensure that the most appropriate and efficient audit tools and techniques are adopted.

16.13 The Parliamentary Liaison group is responsible for co-ordination of the Office's relations with the Public Accounts Committee and other House of Commons committees, audit team preparation for hearings of the PAC, and assistance to the Committee, its Clerk and research staff. Combined with the Reports function, it helps to ensure that the Office's reports to the House meet the needs of the Members.

16.14 The Reports group is responsible for central review and editing of the annual Report to the House of Commons and for its production. The group also provides reporting guidelines to audit teams, and edits and revises project reports, special reports and other material written in the Office for internal and external distribution.

16.15 The Program Planning group is responsible for developing systems to co-ordinate the Office's short and medium-term plans, including audit work to be undertaken by the Office over the five-year cycle. Through regular information and analysis provided by the Priority Resource Allocation and Management System (PRAMS), the group assists the Executive Committee with co-ordinating the allocation of professional staff and financial resources among the Branches.

16.16 The Professional Development group is responsible for training and development courses, including comprehensive auditing courses, and related activities for Office staff. One of the responsibilities of the group is to provide students-in-accounts with training opportunities to meet the specific requirements of recognized professional accounting accreditation bodies.

16.17 The Finance and Administration Branch administers the Office's financial and management control and information systems. It also negotiates all contracts for auditing and consulting professionals and monitors their engagement. The Branch provides administrative support services, including library, mail and messenger, materiel, records, word processing, accommodation, telecommunication and security services.

16.18 The Human Resources Branch has responsibility for personnel management, including recruitment, compensation planning and services, staff relations, implementation of bilingualism policies and human resource planning. It also assists with the Office's government-wide audits of payroll costs management.

16.19 Advisers to the Auditor General. The Auditor General has two main groups of outside advisers. Both groups are made up of leading members of the accounting and management consulting professions. The Panel of Senior Advisers counsels the Auditor General on the application of comprehensive auditing, with particular emphasis on public sector corporate entities. Members of the Panel are:

- | | |
|--|--|
| - Kenneth G. Belbeck, C.M.C.
President,
Thorne Stevenson & Kellogg | - James J. Macdonell, F.C.A.
Chairman,
Canadian Comprehensive Auditing
Foundation |
| - H. Marcel Caron, C.A.
Executive Partner,
Clarkson Gordon | - Edward W. Netten, C.A.
Managing Partner,
Price Waterhouse Associates |
| - Warren Chippindale, C.A.
Chairman, Executive Committee
and Managing Partner,
Coopers & Lybrand | - Robert M. Rennie, C.A.
Chairman and
Executive Officer,
Touche Ross & Co. |
| - Gordon H. Cowperthwaite, F.C.A.
Chairman, Executive Committee,
Peat, Marwick, Mitchell & Co. and
Peat, Marwick and Partners | - Eddie C. Wilburn, F.C.A.
Senior Partner,
Deloitte Haskins & Sells |
| - Kenneth S. Gunning, F.C.A.
Executive Partner,
Thorne Riddell | |

16.20 The Independent Advisory Committee on Government Accounting and Auditing Standards is made up of senior representatives of accounting firms, management consulting firms, and the academic community. The Committee reviews major documents, such as the opinion and observations on the annual financial statements of the Government and the Office's *Comprehensive Auditing Manual* and Audit Guides. Members are:

- | | |
|---|--|
| - W. Ross Walker, F.C.A.
Peat, Marwick, Mitchell & Co. | - P. Howard Lyons, F.C.A.
Deloitte Haskins & Sells |
| - Rodney J. Anderson, F.C.A.
Clarkson Gordon | - Guy Martin, C.A.
Raymond, Chabot, Martin, Paré & Associés |
| - Kenneth F.Y. Baynton, C.A.
Thorne Riddell | - Edward W. Netten, C.A.
Price Waterhouse Associates |
| - Donald A. Brown, C.A.
Coopers & Lybrand | - Ronald B. Robinson, C.M.C.
Thorne Stevenson & Kellogg |
| - Alan J. Dilworth, F.C.A.
Touche Ross & Co. | - Professor L.S. Rosen, F.C.A.
York University |
| - Alwyn D. Lloyd, C.A.
MacGillivray & Co. | - William R. Sloan, F.C.A.
Arthur Andersen & Co. |

Assistance to the Standing Committee on Public Accounts

16.21 Designated senior members of the Office attend all meetings of the Standing Committee on Public Accounts to provide explanations concerning matters raised in the Auditor General's annual Reports to the House of Commons. The Office also assists the Sub-committee on Agenda and Procedure in planning the Committee's schedule for its review of the annual Reports.

International Activities

16.22 The Auditor General of Canada is the external auditor of the International Civil Aviation Organization (ICAO), a United Nations specialized agency with headquarters in Montreal. In addition to presenting an annual report to the United Nations General Assembly, the Auditor General is required to express his opinion on the financial statements of ICAO and on the status of funds held by ICAO as Executing Agency for the United Nations Development Program. The annual audit report of ICAO for the year ended 31 December 1980 emphasized the need for changes in financial management and control procedures and revisions to the financial regulations. The report recommended improvements in such areas as the collection of assessments under the Regular Program, the calculation of assessments under Joint Financing Agreements, and in financial management of the Technical Assistance Program.

16.23 Although Canada ceased to be a member of the United Nations Board of Auditors in June 1980, the Auditor General continues, by virtue of his ICAO responsibilities, to be a member of the Panel of External Auditors of the United Nations, the Specialized Agencies, and the International Atomic Energy Agency. The Panel's twenty-third Regular Session was held in Vienna in October 1981 and considered the Canadian proposal for restructuring the United Nations Board of Auditors, among other subjects.

16.24 Senior members of the Office participated in a number of other international activities. The Auditor General took part in meetings of the Governing Board of the International Organization of Supreme Audit Institutions (INTOSAI) in Vienna in May 1981 and led the Canadian delegation to the XIth Conference of Commonwealth Auditors General in Kingston, Jamaica in October 1981.

16.25 During the year, four prominent auditors from developing nations worked in the Audit Office as part of a Fellowship program administered by the Canadian Comprehensive Auditing Foundation. The program is designed to help developing nations upgrade their public sector auditing capabilities. In addition to the practical experience of working on comprehensive audits, the Fellows take part in a series of formal training programs arranged by the Professional Development group. Participating this year were Lucita Andres from the Philippines Commission on Audit, Dorus Odamtten of the Directorate of the Ghana Government Audit Service, Fong Heng Boo of the Singapore Government's Audit Department and C. Nesarajah from the Office of the Auditor General of Malaysia.

Co-operation with Professional Organizations

16.26 Canadian Institute of Chartered Accountants. Assistant Auditor General J.J. Kelly has been seconded for 30 months to the Canadian Institute of Chartered Accountants to assist in the development of public sector accounting and auditing standards. In addition, Deputy Auditor General D. Larry Meyers is a member of the recently established committee on public sector accounting and auditing standards. The Auditor General, and Deputy Auditor General Michael H. Rayner, have also been involved in various committees of the CICA.

16.27 Canadian Comprehensive Auditing Foundation. On 1 April 1981, E.F. McNamara, Assistant Auditor General, Control Evaluations Branch, joined the Canadian Comprehensive Auditing Foundation under an executive interchange agreement. During his two years with the Foundation, he will serve as Director, Methodology and Professional Development.

Canadian Conference of Legislative Auditors

16.28 Co-ordinating task force on the audit of federal income tax records. Federal-provincial tax collection agreements define the extent to which

provincial legislative auditors are permitted to audit the taxes collected and the various tax credits distributed on behalf of their provinces by the federal government.

16.29 At their annual meeting in July 1981, Canada's legislative auditors reviewed the progress of a task force which had been established early in 1979 to address concerns expressed by provincial legislative auditors regarding the federal role in collecting provincial taxes. The task force consisted of representatives from two provinces and members of the Office of the Auditor General of Canada.

16.30 Provincial legislative auditors wanted additional audit assurance to support their opinions on their provincial income tax revenue and credits because the tax collection agreements, in effect, prevent them from auditing most aspects of a taxpayer's return. Their second major concern was that, if each provincial legislative auditor were to audit to the extent permitted under the provisions of the agreements, there would be considerable duplication of effort. From the point of view of officials and staff of the Department of National Revenue - Taxation and the Department of Finance, the duplication would cause significant disruption and inconvenience.

16.31 The task force, therefore, undertook to review this Office's audit programs, findings and reports relating to assessing, proper allocation and accounting for personal and corporate income tax and various provincial tax credits and to report whether the concerns expressed by provincial legislative auditors were adequately addressed in the audit work. This will provide the provincial legislative auditors with additional audit assurance that they can use in formulating their opinions on their provincial income tax revenue and credits while, at the same time, remaining within the strict provisions of the federal-provincial tax collection agreements.

16.32 At their special meeting in Toronto on 13 September 1981, the legislative auditors agreed to rely on the Office of the Auditor General of Canada. Accordingly, new procedures were agreed upon that will provide provincial legislative auditors affected with appropriate assurances on income tax matters.

16.33 **Legislative Auditors' Annual Meeting.** The Canadian Conference of Legislative Auditors held its ninth annual meeting in St. Andrews, N.B. in July 1981. At the same time, the chairmen of federal and provincial Public Accounts Committees held their third annual meeting. A joint meeting of legislative auditors and Public Accounts Committee chairmen was also held. Guest speakers included the Honourable Richard B. Hatfield, Premier of New Brunswick, Bruce McDonald of William Mercer Limited, James J. Macdonell, Chairman, Canadian Comprehensive Auditing Foundation, and Harry G. Rogers, Comptroller General of Canada.

Resources of the Office

16.34 Human resources. At 1 August 1981, 203 members of the Office were qualified for membership in the recognized accounting associations. Of the other members of the Office's professional staff, 49 held other qualifications, and 62 students-in-accounts were enrolled in programs leading to accounting designations.

16.35 The Office continues to make extensive use of resources from the private sector to supplement its own staff resources. In addition to providing a variety of skills and knowledge that the Office does not require on a permanent basis, these professionals have an enriching influence. They join the Office either on individual professional service contracts or through the Public Service Commission's Interchange Canada Program. Since 1974, 147 partners and managers from major public accounting and management consulting firms have joined the Office for varying periods of time and, at 1 August 1981, the Office had 21 people associated under Interchange Canada. At the same date, another 229 were under professional service contracts.

16.36 The following table presents a profile of the full-time staff of the Office. It excludes persons serving on Executive Interchange agreements or those on professional service contracts.

	1 August <u>1981</u>	31 March <u>1981</u>	31 March <u>1980</u>
Principals, including Executive and Management Committees	58	50	40
Directors and Managers	79	76	79
Supervisors and Auditors	124	134	125
Other audit staff	75	69	84
Administrative support staff	<u>153</u>	<u>153</u>	<u>147</u>
	<u>489</u>	<u>482</u>	<u>475</u>
National Capital Region	410	401	382
Other Regions	<u>79</u>	<u>81</u>	<u>93</u>
	<u>489</u>	<u>482</u>	<u>475</u>

16.37 Members of the Audit Office who retired before 1 August 1981 were: George R. Atkinson, an Audit Supervisor with 24 years in the Public Service, and Dan G. Crone, the Director of Administration, with 15 years in the Public Service.

OFFICE OF THE AUDITOR GENERAL OF CANADA

ESTIMATES AND EXPENDITURES

Estimates and Expenditures by Activity					
	1981-82	1980-81		1979-80	
	<u>Estimates</u>	<u>Estimates</u>	<u>Expenditures</u>	<u>Estimates</u>	<u>Expenditures</u>
	(thousands of dollars)				
Government Audits	26,493	24,539	22,019	22,283	20,881
Other Audits	111	251	205	542	546
Administration	<u>5,282</u>	<u>3,980</u>	<u>4,411</u>	<u>2,995</u>	<u>3,828</u>
TOTAL	<u>31,886</u>	<u>28,770</u>	<u>26,635</u>	<u>25,820</u>	<u>25,255</u>
Estimates and Expenditures by Object					
	1981-82	1980-81		1979-80	
	<u>Estimates</u>	<u>Estimates</u>	<u>Expenditures</u>	<u>Estimates</u>	<u>Expenditures</u>
	(thousands of dollars)				
Salaries and Wages	17,514	15,403	14,049	13,622	12,565
Employee Benefit Plans	2,277	2,012	2,016	1,541	1,526
Transportation and Communications	1,145	1,396	1,174	1,235	1,044
Information	115	176	63	87	117
Professional and Special Services including Executive Interchange	9,680	8,770	8,264	8,657	8,813
Rentals	245	335	275	149	217
Purchased Repair and Upkeep	40	77	47	56	28
Utilities, Materials and Supplies	515	493	500	314	425
Construction and Acquisition of Machinery and Equipment	61	102	134	141	366
Grants and Contributions	290	-	108	-	150
All Other Expenditures	<u>4</u>	<u>6</u>	<u>5</u>	<u>18</u>	<u>4</u>
TOTAL	<u>31,886</u>	<u>28,770</u>	<u>26,635</u>	<u>25,820</u>	<u>25,255</u>

16.38 Official Languages. In implementing our Official Languages Program during the last year, emphasis was placed on taking corrective action in some problem areas identified by the Commissioner of Official Languages with respect to "service to the public" and "full participation" of the two official language groups. The Office has made significant progress in these areas as witnessed by the Commissioner's appraisal of the OAG in his 1980 Annual Report. During the current fiscal year, the Office will concentrate its efforts on various "language-of work" issues. Emphasis will be placed on improving the effectiveness of the Office's existing bilingual capability in accordance with the Auditor General's commitment to make the Office truly bilingual.

16.39 Estimates and expenditures. Exhibit 16.2 presents the Estimates and Expenditures of the Office, by Activity and by Object.

16.40 Office organization. The Office is being reorganized to meet effectively its newly stated objectives with due regard for economy and efficiency. This reorganization will occur during the winter of 1981-82 and will be reported in the 1982 annual Report.

APPENDICES

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APPENDIX A

AUDITOR GENERAL ACT

25-26 ELIZABETH II

CHAPTER 34

An Act respecting the office of the Auditor General of Canada and matters related or incidental thereto

[Assented to 14th July, 1977]

Her Majesty, by and with the advice and consent of the Senate and House of Commons of Canada, enacts as follows:

PART I

SHORT TITLE

1. This Part may be cited as the *Auditor General Act*.

(3) Once having served as the Auditor General, a person is not eligible for re-appointment to that office.

Re-appoint-
ment

INTERPRETATION

2. In this Act,

"Auditor General" means the Auditor General of Canada appointed pursuant to subsection 3(1);

(4) In the event of the absence or incapacity of the Auditor General or if the office of Auditor General is vacant, the Governor in Council may appoint a person temporarily to perform the duties of Auditor General.

Vacancy

"Crown corporation" has the meaning assigned to that expression by subsection 66(1) of the *Financial Administration Act*;

4. (1) The Auditor General shall be paid a salary equal to the salary of a puisne judge of the Supreme Court of Canada.

Salary

"department" has the meaning assigned to that term by section 2 of the *Financial Administration Act*;

(2) The provisions of the *Public Service Superannuation Act*, other than those relating to tenure of office, apply to the Auditor General except that a person appointed as Auditor General from outside the Public Service may, by notice in writing given to the President of the Treasury Board not more than sixty days after the date of his appointment as Auditor General, elect to participate in the pension plan provided for in the *Diplomatic Service (Special) Superannuation Act* in which case the provisions of that Act, other than those relating to tenure of office, apply to him and the provisions of the *Public Service Superannuation Act* do not apply to him.

Pension benefits

"registrar" means the Bank of Canada and a registrar appointed under Part IV of the *Financial Administration Act*.

AUDITOR GENERAL OF CANADA

3. (1) The Governor in Council shall, by commission under the Great Seal, appoint a qualified auditor to be the officer called the Auditor General of Canada to hold office during good behaviour for a term of ten years, but the Auditor General may be removed by the Governor in Council on address of the Senate and House of Commons.

DUTIES

(2) Notwithstanding subsection (1), the Auditor General ceases to hold office on attaining the age of sixty-five years.

5. The Auditor General is the auditor of the accounts of Canada, including those relating to the Consolidated Revenue Fund

Examination

and as such shall make such examinations and inquiries as he considers necessary to enable him to report as required by this Act.

Idem

6. The Auditor General shall examine the several financial statements required by section 55 of the *Financial Administration Act* to be included in the Public Accounts, and any other statement that the Minister of Finance may present for audit and shall express his opinion as to whether they present fairly information in accordance with stated accounting policies of the federal government and on a basis consistent with that of the preceding year together with any reservations he may have.

Report to House of Commons

7. (1) The Auditor General shall report annually to the House of Commons
(a) on the work of his office; and
(b) on whether, in carrying on the work of his office, he received all the information and explanations he required.

Idem

(2) Each report of the Auditor General under subsection (1) shall call attention to anything that he considers to be of significance and of a nature that should be brought to the attention of the House of Commons, including any cases in which he has observed that

(a) accounts have not been faithfully and properly maintained or public money has not been fully accounted for or paid, where so required by law, into the Consolidated Revenue Fund;

(b) essential records have not been maintained or the rules and procedures applied have been insufficient to safeguard and control public property, to secure an effective check on the assessment, collection and proper allocation of the revenue and to ensure that expenditures have been made only as authorized;

(c) money has been expended other than for purposes for which it was appropriated by Parliament;

(d) money has been expended without due regard to economy or efficiency; or

(e) satisfactory procedures have not been established to measure and report the

effectiveness of programs, where such procedures could appropriately and reasonably be implemented.

(3) Each annual report by the Auditor General to the House of Commons shall be submitted to the Speaker of the House of Commons on or before the 31st day of December in the year to which the report relates and the Speaker of the House of Commons shall lay each such report before the House of Commons forthwith after receipt thereof by him or, if that House is not then sitting, on the first day next thereafter that the House of Commons is sitting.

Submission of reports to Speaker and tabling in the House of Commons

8. (1) The Auditor General may make a special report to the House of Commons on any matter of pressing importance or urgency that, in his opinion, should not be deferred until the presentation of his annual report.

Special report

(2) Each special report of the Auditor General to the House of Commons made under subsection (1) or 20(2) shall be submitted to the Speaker of the House of Commons and shall be laid before the House of Commons by the Speaker of the House of Commons forthwith after receipt thereof by him, or if that House is not then sitting, on the first day next thereafter that the House of Commons is sitting.

Submission of report to Speaker and tabling in the House of Commons

9. The Auditor General shall

Idem

(a) make such examination of the accounts and records of each registrar as he deems necessary, and such other examinations of a registrar's transactions as the Minister of Finance may require; and

(b) when and to the extent required by the Minister of Finance, participate in the destruction of any redeemed or cancelled securities or unissued reserves of securities authorized to be destroyed under the *Financial Administration Act*;

and he may, by arrangement with a registrar, maintain custody and control, jointly with that registrar, of cancelled and unissued securities.

10. Whenever it appears to the Auditor General that any public money has been improperly retained by any person, he shall forthwith report the circumstances of the case to the President of the Treasury Board.

Improper retention of public money

Inquiry and report

11. The Auditor General may, if in his opinion such an assignment does not interfere with his primary responsibilities, whenever the Governor in Council so requests, inquire into and report on any matter relating to the financial affairs of Canada or to public property or inquire into and report on any person or organization that has received financial aid from the Government of Canada or in respect of which financial aid from the Government of Canada is sought.

Advisory powers

12. The Auditor General may advise appropriate officers and employees in the public service of Canada of matters discovered in his examinations and, in particular, may draw any such matter to the attention of officers and employees engaged in the conduct of the business of the Treasury Board.

ACCESS TO INFORMATION

Access to information

13. (1) Except as provided by any other Act of Parliament that expressly refers to this subsection, the Auditor General is entitled to free access at all convenient times to information that relates to the fulfilment of his responsibilities and he is also entitled to require and receive from members of the public service of Canada such information, reports and explanations as he deems necessary for that purpose.

Stationing of officers in departments

(2) In order to carry out his duties more effectively, the Auditor General may station in any department any person employed in his office, and the department shall provide the necessary office accommodation for any person so stationed.

Oath of secrecy

(3) The Auditor General shall require every person employed in his office who is to examine the accounts of a department or of a Crown corporation pursuant to this Act to comply with any security requirements applicable to, and to take any oath of secrecy required to be taken by, persons employed in that department or Crown corporation.

Inquiries

(4) The Auditor General may examine any person on oath on any matter pertaining to any account subject to audit by him and for the purposes of any such examination the Auditor General may exercise all the powers of a commissioner under Part I of the *Inquiries Act*.

14. (1) Notwithstanding subsections (2) and (3), in order to fulfil his responsibilities as the auditor of the accounts of Canada, the Auditor General may rely on the report of the duly appointed auditor of a Crown corporation or of any subsidiary of a Crown corporation.

Reliance on audit reports of Crown corporations

(2) The Auditor General may request a Crown corporation to obtain and furnish to him such information and explanations from its present or former directors, officers, employees, agents and auditors or those of any of its subsidiaries as are, in his opinion, necessary to enable him to fulfil his responsibilities as the auditor of the accounts of Canada.

Auditor General may request information

(3) If, in the opinion of the Auditor General, a Crown corporation, in response to a request made under subsection (2), fails to provide any or sufficient information or explanations, he may so advise the Governor in Council, who may thereupon direct the officers of the corporation to furnish the Auditor General with such information and explanations and to give him access to those records, documents, books, accounts and vouchers of the corporation or any of its subsidiaries access to which is, in the opinion of the Auditor General, necessary for him to fulfil his responsibilities as the auditor of the accounts of Canada.

Direction of the Governor in Council

STAFF OF THE AUDITOR GENERAL

15. (1) Such officers and employees as are necessary to enable the Auditor General to perform his duties shall be appointed in accordance with the *Public Service Employment Act*.

Officers, etc.

(2) Subject to any other Act of Parliament or regulations made thereunder, but without the approval of the Treasury Board, the Auditor General may, within the total dollar limitations established for his office in

Contract for professional services

Appropriation Acts, contract for professional services.

(3) The Auditor General may exercise and perform, in such manner and subject to such terms and conditions as the Public Service Commission directs, the powers, duties and functions of the Public Service Commission under the *Public Service Employment Act*,

Delegation to Auditor General

other than the powers, duties and functions of the Commission in relation to appeals under sections 21 and 31 of that Act and inquiries under section 32 of that Act.

Suspension

(4) The Auditor General may suspend from the performance of his duty any person employed in his office.

Responsibility for personnel management

16. In respect of persons employed in his office, the Auditor General is authorized to exercise the powers and perform the duties and functions of the Treasury Board under the *Financial Administration Act* that relate to personnel management including the determination of terms and conditions of employment and the responsibility for employer and employee relations, within the meaning of paragraph 5(1)(e) and section 7 of that Act.

Collective agreements

17. Any collective agreement affecting persons employed in the office of the Auditor General entered into before the coming into force of this Act remains in force and binds the Auditor General as employer of such persons until the expiry of that agreement.

Classification standards

18. Classification standards may be prepared for persons employed in the office of the Auditor General to conform with the classifications that the Auditor General recognizes for the purposes of that office.

Delegation

19. The Auditor General may designate a senior member of his staff to sign on his behalf any opinion that he is required to give and any report, other than his annual report on the financial statements of Canada made pursuant to section 55 of the *Financial Administration Act* and his reports to the House of Commons under this Act and any member so signing an opinion or report shall indicate beneath his signature his position in the office of the Auditor General and the fact that he is signing on behalf of the Auditor General.

ESTIMATES

20. (1) The Auditor General shall annually prepare an estimate of the sums that will be required to be provided by Parliament for the payment of the salaries, allowances and expenses of his office during the next ensuing fiscal year.

Estimates

(2) The Auditor General may make a special report to the House of Commons in the event that amounts provided for his office in the estimates submitted to Parliament are, in his opinion, inadequate to enable him to fulfil the responsibilities of his office.

Special report

21. The provisions of the *Financial Administration Act* with respect to the division of appropriations into allotments do not apply in respect of appropriations for the office of the Auditor General.

Appropriation allotments

AUDIT OF THE OFFICE OF THE AUDITOR GENERAL

22. (1) A qualified auditor nominated by the Treasury Board shall examine the receipts and disbursements of the office of the Auditor General and shall report annually the outcome of his examinations to the House of Commons.

Audit of office of the Auditor General

(2) Each report referred to in subsection (1) shall be submitted to the President of the Treasury Board on or before the 31st day of December in the year to which the report relates and the President of the Treasury Board shall lay each such report before the House of Commons within fifteen days after receipt thereof by him or, if that House is not then sitting, on any of the first fifteen days next thereafter that the House of Commons is sitting.

Submission of reports and tabling

PART II

CONSEQUENTIAL AND RELATED AMENDMENTS

R.S., c. F-10	23. Part VII of the <i>Financial Administration Act</i> is repealed.		
R.S., c. P-35	24. (1) Part I of Schedule I to the <i>Public Service Staff Relations Act</i> is amended by deleting therefrom the words "Office of the Auditor General of Canada". (2) Part II of Schedule I to the <i>Public Service Staff Relations Act</i> is amended by adding thereto the words "Office of the Auditor General of Canada".		
R.S., c. E-8	25. Section 16 of the <i>Established Programs (Interim Arrangements) Act</i> is repealed and the following substituted therefor:		
Powers of Auditor General	"16. Nothing in this Act shall be construed to restrict the powers of the Auditor General of Canada under the <i>Auditor General Act</i> ."		
1970-71-72, c. 52	26. Section 27 of the French version of the <i>Pilotage Act</i> is repealed and the following substituted therefor:		
Vérificateur général	"27. Le vérificateur général vérifie chaque année la comptabilité et les opérations financières de chaque Administration et en fait rapport au Ministre."		
R.S., c. N-22	27. Subsection 23(5) of the <i>Northwest Territories Act</i> is repealed and the following substituted therefor:		
	"(5) The Auditor General has, in connection with his examination of the accounts of the Territories, all the powers that he has under the <i>Auditor General Act</i> in connection with the examination of the accounts of Canada."	Powers of Auditor General	
	28. Subsection 26(5) of the <i>Yukon Act</i> is repealed and the following substituted therefor:	R.S., c. Y-2	
	"(5) The Auditor General has, in connection with his examination of the accounts of the Territory, all the powers that he has under the <i>Auditor General Act</i> in connection with the examination of the accounts of Canada."	Powers of Auditor General	
	29. Section 15 of the French version of the <i>Unemployment Insurance Act, 1971</i> is repealed and the following substituted therefor:	1970-71-72, c. 48	
	"15. Le vérificateur général vérifie chaque année la comptabilité et les opérations financières de la Commission et en fait rapport au Ministre."	Vérification	
	30. Whenever, in the French version, the expression "auditeur général" appears in any provision of an Act listed in the schedule to this Act, there shall in every case, unless the context otherwise requires, be substituted the expression "vérificateur général".	Amendments to French version	

PART III

COMMENCEMENT

Coming into force **31.** This Act shall come into force on a day to be fixed by proclamation.

(The Act came into force 1 August 1977)

APPENDIX B

FINANCIAL ADMINISTRATION ACT -

EXTRACTS FROM PART VIII

FINANCIAL ADMINISTRATION ACT

R.S., c. F-10

Extracts from Part VIII

CROWN CORPORATIONS

Access to books,
etc

76. The auditor is entitled to have access at all convenient times to all records, documents, books, accounts and vouchers of a corporation, and is entitled to require from the directors and officers of the corporation such information and explanations as he deems necessary. R.S., c. 116, s. 86.

Auditor's report

77. (1) The auditor shall report annually to the appropriate Minister the result of his examination of the accounts and financial statements of a corporation, and the report shall state whether in his opinion

(a) proper books of account have been kept by the corporation;

(b) the financial statements of the corporation

(i) were prepared on a basis consistent with that of the preceding year and are in agreement with the books of account,

(ii) in the case of the balance sheet, give a true and fair view of the state of the corporation's affairs as at the end of the financial year, and

(iii) in the case of the statement of income and expense, give a true and fair view of the income and expense of the corporation for the financial year; and

(c) the transactions of the corporation that have come under his notice have been within the powers of the corporation under this Act and any other Act applicable to the corporation;

and the auditor shall call attention to any other matter falling within the scope of his examination that in his opinion should be brought to the attention of Parliament.

(2) The auditor shall from time to time make to the corporation or to the appropriate Minister such other reports as he may deem necessary or as the appropriate Minister may require.

Other reports

(3) The annual report of the auditor shall be included in the annual report of the corporation.

Annual report

(4) Notwithstanding section 68, this section operates in lieu of section 132 of the *Canada Corporations Act* or sections 159 to 161 of the *Canada Business Corporations Act*, as the case may be.

Audit

78. In any case where the auditor is of the opinion that any matter in respect of a corporation should be brought to the attention of the Governor in Council, the Treasury Board or the Minister of Finance, such report shall be made forthwith through the appropriate Minister. R.S., c. 116, s. 88.

Report through
Minister

APPENDIX C

REPORTS OF THE STANDING COMMITTEE ON PUBLIC ACCOUNTS TO THE HOUSE OF COMMONS:

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SECOND REPORT OF THE STANDING COMMITTEE ON PUBLIC ACCOUNTS TO THE HOUSE OF COMMONS, NOVEMBER 21, 1980

REPORT TO THE HOUSE

Friday, November 21, 1980

The Standing Committee on Public Accounts has the honour to present its

SECOND REPORT

1. In accordance with its permanent Order of Reference contained in the Standing Orders of the House of Commons, your Committee has considered the Reports of the Auditor General of Canada to the House of Commons for the fiscal years ended March 31, 1978 and 1979, Chapter 4—Measuring and Increasing Efficiency, and Chapter 9—Payroll Costs Management, respectively.

2. The cooperation of the witnesses who appeared before your Committee is acknowledged and appreciated.

Recommendation

3. With respect to the implications of the audit findings to improve government accountability to Parliament, your Committee recommends that the Government cause a test of efficiency to be conducted, modelled on the test conducted and reported by the Auditor General. The test should be designed to measure the extent and rate of improvement in the efficiency actually achieved within the Government of Canada. It is recommended that these test results be provided to the Standing Committee on Public Accounts not later than December 31, 1981. This will give Members of Parliament an opportunity to compare current efficiency levels achieved by management two years after the 1979 Report of the Auditor General.

Background

4. The First Report of the Standing Committee on Public Accounts reviewed testimony and submissions on two of the three major areas covered in the Study of Procedures in Cost Effectiveness (SPICE). This Second Report completes the review of audit findings and testimony on "Measuring and Increasing Efficiency", which relates closely to the test of efficiency reported in the 1979 Report of the Auditor General. Accordingly, both are considered in this Second Report.

Efficiency

5. As one aspect of its investigations, the SPICE project conducted a number of examinations of the activities of government to measure and increase efficiency. Performance

measurement systems in sixteen major areas of activity in twelve departments and involving about 100,000 person-years were audited. Most major applications of performance measurement in operation at the time of the audit were reviewed.

6. The Auditor General has tried to determine what constitutes due regard for efficiency. His basic point of departure is that the public service managers should monitor their operations and actively seek means of increasing efficiency. To guide his audits of efficiency, he has established a set of audit criteria. Briefly, they are:

- (a) measures of performance should be relevant and accurate;
- (b) performance should be adequate in comparison to the standard;
- (c) reports should be tailored to management needs;
- (d) performance data should be used to achieve productivity improvement; and
- (e) productivity measures and reports should be kept current.

7. Your Committee endorses the audit criteria drafted by the Auditor General. It believes that the criteria represent minimum acceptable standards by which to judge management performance in measuring and improving efficiency. Furthermore, in testimony and written evidence before your Committee, the Office of the Comptroller General and departments whose performance measurement systems were examined, supported the audit criteria.

8. The evidence submitted to your Committee shows that most of the performance measurement systems examined by the Auditor General failed to satisfy these criteria. Your Committee examined two case histories. In one, External Affairs—Passport Office, the operating controls were generally satisfactory; in the other, Post Office—Mail Processing, management efforts did not meet the standards embodied in the audit criteria.

9. In your Committee's opinion, the performance measurement systems reviewed by the Auditor General exhibited substantial weakness in management control. Testimony indicated general concern for improved management processes. Departments have submitted extensive documentation describing their efforts to strengthen management controls. The Comptroller General has placed emphasis on performance measurement systems in his IMPAC project.

10. The emphasis on improving efficiency is not new. Submissions and testimony have revealed that in 1973, the Treasury Board directed departments and agencies to institute systems to monitor efficiency. A further circular that was issued by the Treasury Board in 1976 indicated that performance measurement implementation should be accelerated and completed by 1980. Your Committee has noted that the President of the Treasury Board has tabled two progress reports in the House, indicating the successes and the problems of implementing performance measurement systems.

11. As a result of his audit investigations, the Auditor General concluded that only two of the sixteen systems examined were considered satisfactory. Most of the performance measurement systems reviewed did not play an important part in the program management process. They generally did not satisfy the information needs of the operating manager who must make the day-to-day decisions required to control productivity. In most operations, management did not know the actual level of efficiency or how much it might be increased. In most labour intensive situations, there was insufficient effort to increase productivity.

Test of Efficiency

12. Because of the lack of management controls identified in his 1978 Annual Report and of the general weakness of management controls identified in other audit investigations, the Auditor General conducted a limited test to assess the actual level of efficiency being achieved in government operations. The test addressed the criterion that 80 per cent is the minimum acceptable level of efficiency where it is appropriate and reasonable to use work measurement techniques. The test was limited in scope, being restricted to the Clerical and Regulatory (CR) category.

13. Because of limited resources and a desire to work in cooperation with departments, the test was subject to a

number of potential biases. These biases, primarily the non-random selection of units to be audited, meant that the test was not conducted according to a rigorous statistical design. In each case, the bias was recognized and was treated in a manner which would tend to be favourable to the efficiency results. In other words, the efficiency results tend to overstate the actual level of efficiency achieved in the units that were examined. The test showed an average efficiency of about 60 per cent against engineered standards. Strictly speaking, this result cannot be generalized to the population of CRs. Nevertheless, it presents compelling evidence that efficiency is probably below the minimum acceptable level of 80 per cent.

14. Your Committee judges it extremely unlikely that there are many units operating under the same conditions as those studied which are achieving the minimum acceptable level of efficiency of 80 per cent. The test therefore indicates that there are substantial opportunities for improvements in efficiency among the CR group. Because of the general weakness or absence of performance measurement systems, your Committee concludes that equivalent opportunities for improvement are widespread throughout government.

15. This situation is a matter of considerable concern. It represents a major weakness in the systems whereby managers in government indicate their expectations of employees and monitor the extent to which those expectations have been fulfilled. Your Committee recognizes that a test of efficiency does reflect on employees. Efficiency is a responsibility of management. Improving efficiency is by no means simple. Its importance leads your Committee to urge prompt and continuing attention to performance measurement by the Government.

16. A copy of the relevant Minutes of Proceedings and Evidence (*Issues Nos. 5, 8 and 9 of the First Session of The Thirty-First Parliament and Issues Nos. 1, 6 and 13 of the First Session of the Thirty-Second Parliament*) is tabled.

Respectfully submitted,

Bill Clarke
Chairman

THIRD REPORT OF THE STANDING COMMITTEE ON PUBLIC ACCOUNTS TO THE HOUSE OF COMMONS, JANUARY 14, 1981

REPORT TO THE HOUSE

Wednesday, January 14, 1981

The Standing Committee on Public Accounts has the honour to present its

THIRD REPORT

1. In accordance with its permanent Order of Reference contained in the Standing Orders of the House of Commons, your Committee has considered the Report of the Auditor General of Canada to the House of Commons for the fiscal year ended March 31, 1978 and, in particular, Chapter 9—Contracting Procedures.

2. The co-operation of the Honourable Erik Nielsen, Minister of Public Works at the time of his appearance, and the other witnesses who appeared before your Committee is acknowledged and appreciated.

3. In 1977-78 the Auditor General completed a special study of the practices followed by government in entering into and administering contracts for construction and for the acquisition of goods and services. Your Committee reviewed the findings of the Auditor General and heard testimony on the government-wide issues from the Treasury Board Secretariat, the Office of the Comptroller General, the Department of Supply and Services, and the Department of Public Works.

4. Your Committee was informed that the Auditor General examined 1528 contracts, selected on a representative basis with a total value of \$3 billion.

5. The Auditor General reported that some Government Contract Regulations have been misinterpreted; he also revealed a number of weaknesses and deficiencies in contract administration at the government-wide level in the areas of:

- (a) competitive tendering;
- (b) pricing methods and payment terms;
- (c) contract approvals in emergency situations;
- (d) departmental delegations of authority;
- (e) commitment authority; and
- (f) payment of contractors' accounts.

The Auditor General made some specific recommendations in these areas.

6. In their submission before your Committee in November 1979, officials of the Treasury Board Secretariat acknowledged the criticisms of the Auditor General and responded positively to each of the four government-wide recommenda-

tions made by the Auditor General by issuing the following documents:

(a) Circular No. 1978-54—Preparation of Submissions for approval of Contracts, December 6, 1978 (now superseded by Appendix E to Chapter 310 of the Administrative Policy Manual);

(b) Chapter 312—Administrative Policy Manual—Article 7, Contracting for Consulting and Professional Services, September 1979; and

(c) Circular No. 1979-20—Directives on Cost Control, July 27, 1979.

7. In November 1980, as a result of a request from your Committee, Treasury Board officials reported a number of continuing significant deficiencies and deviations in contract administration. They range from a lack of compliance in the policy areas relating to employer-employee relationships and cost-effectiveness to the relatively high use of retroactive and sole-source contracts. It was reported that a significant proportion of contract submissions lacked essential information and did not comply with Treasury Board directives.

8. Your Committee concludes that the Treasury Board action to revise and update government policy and guidelines on contracting and cost control is a positive response to improving contract administration. However, your Committee recognizes the continuous need for monitoring compliance in this area as evidenced by the Treasury Board's update of November, 1980.

9. The Auditor General also revealed that a significant number of contracts were not awarded under a competitive tendering process but on an exception basis under Section 8 of the Government Contract Regulations. This Section requires that tenders be invited before entry into contract except where:

- (a) the need is one of pressing emergency in which delay would be injurious to the public interest; or
- (b) the estimated expenditure involved does not exceed \$15,000; or
- (c) the nature of the work is such that it would not be in the public interest to invite tenders; or
- (d) only one person is capable of performing the contract.

10. Testimony and evidence submitted to your Committee showed that of the 281,920 contracts awarded by the Department of Supply and Services—Supply Administration in fiscal year 1976-77, 89,659 contracts or 31.8 per cent totalling \$1.8 billion were in the sole-source category. Of this amount, \$935

million were for major contracts in defence. Your Committee recognizes the fact that certain circumstances justify the non-competitive selection of a contractor. However, your Committee holds the view that the contract regulations for the category of exception are open to either misinterpretation or avoidance of the purpose and intent of Section 8, because of the reliance in large measure upon a subjective test for qualification.

11. Your Committee recommends that:

- (a) the Treasury Board adopt stronger measures to ensure that departments and agencies comply with Government Contract Regulations;
- (b) the Comptroller General ensure that the internal audit function monitors compliance;
- (c) the Auditor General continue to follow up on those areas where deficiencies and deviations have been identified;

(d) the Treasury Board undertake a special review of Section 8 of the Government Contract Regulations for the purpose of defining the four exceptions with greater objective precision; and

(e) the Auditor General proceed with an evaluation of the use of the exceptions under Section 8 of the Government Contract Regulations.

12. Your Committee respectfully seeks an early response from the Government to the above recommendations in order that it be informed of the corrective action taken.

13. A copy of the relevant Minutes of Proceedings and Evidence (*Issues Nos. 2, 3 and 13 of the First Session of the Thirty-first Parliament and Nos. 16 and 18 of the First Session of the Thirty-second Parliament*) is tabled.

Respectfully submitted,

Bill Clarke
Chairman

FOURTH REPORT OF THE STANDING COMMITTEE ON PUBLIC ACCOUNTS TO THE HOUSE OF COMMONS, FEBRUARY 20, 1981

REPORT TO THE HOUSE

FRIDAY, FEBRUARY 20, 1981

The Standing Committee on Public Accounts has the honour to present its

FOURTH REPORT

1. In accordance with its permanent Order of Reference contained in the Standing Orders of the House of Commons, your Committee has considered the Report of the Auditor General of Canada to the House of Commons for the fiscal year ended March 31, 1979 and, in particular, Chapter 8 on the Control and Accountability of Crown Corporations.

Introduction

2. Your Committee heard testimony on the desirability of comprehensive auditing in Crown corporations.

3. The co-operation of the witnesses who appeared before your Committee is acknowledged and appreciated.

Summary of Recommendations

4. Your committee recommends:

(a) that the Government introduce legislation which would authorize the Auditor General to put into effect a program of comprehensive auditing in wholly-owned Crown corporations (see paragraph 12 of this Report); and

(b) that the decision to conduct a comprehensive audit be based on the results of a preliminary survey and be concurred in by the corporation's Board of Directors (see paragraph 13 of this Report).

Analysis of Testimony

5. The Auditor General of Canada emphasized two issues in his overview of the subject of comprehensive auditing of Crown corporations. These issues were identified as the ownership issue and the reporting issue. Ownership has reference to the principle of Crown control with the implication that to the extent there is the connection to and dependency on the public purse, to that same extent there must be in place a system of value-for-money or comprehensive auditing so as to ensure that the corporations operate with due regard for economy, efficiency and effectiveness. Reporting has reference to the principles set out in the *Financial Administration Act*, which, in Section 77(1) stipulates that:

"...the auditor shall call attention to any other matter falling within the scope of his examination that in his

opinion should be brought to the attention of Parliament."

6. The Auditor General stated that present legislation does not authorize comprehensive auditing in Crown corporations.

7. The Auditor General noted that commercially-oriented Crown corporations should be included in the comprehensive audit program because of the all-inclusiveness of the ownership principle and in order to assure management of the adequacy of the financial management and reporting procedures they already have in place. He gave assurances that comprehensive audit reports would be made through the Board of Directors of each corporation.

8. Your Committee sought the views of three Crown corporations known to have differing opinions concerning comprehensive auditing.

9. The Canadian Broadcasting Corporation (CBC) fully endorses the principle of comprehensive auditing for ensuring economy and efficiency in its operations. However, the CBC has a number of reservations:

(a) the methodology of comprehensive auditing has not been developed fully;

(b) responsibility for development of systems should remain with the corporation; and

(c) it would be inappropriate "...to attempt to audit the largely non-normative and non-quantifiable determination as to the CBC's "effectiveness" in its programming".

10. Eldorado Nuclear Ltd. is firmly opposed to comprehensive auditing for a number of reasons:

(a) comprehensive auditing is not appropriate for a commercially-oriented Crown corporation;

(b) comprehensive auditing would undermine the role of its Board of Directors;

(c) excessive time demands on management would result; and

(d) the methodology of comprehensive auditing has not been developed fully.

11. Export Development Corporation is unique among the three corporations appearing before your Committee in that it is the only Crown corporation to have actually undergone a comprehensive audit. The Board of Directors and management of Export Development Corporation considered their comprehensive audit to be a very useful and productive exercise. They recommended, however, the following:

(a) involvement of the Board of Directors in the planning and direction of the audit; and

(b) extension of the comprehensive audit time-frame from the present six to eight months to a two-year period in order to reduce management overload.

Conclusions and Recommendations

12. Your Committee, after careful consideration of all the issues raised in testimony and witnesses' opening statements, concludes that the ownership and reporting principles provide a sound basis for the introduction of comprehensive auditing in Crown corporations. Your Committee, bearing in mind the inadequacies of the *Financial Administration Act* in this regard, recommends that the Government introduce legislation which would authorize the Auditor General to put into effect a program of comprehensive auditing in wholly-owned Crown corporations.

13. Your Committee concludes that comprehensive auditing should be applied on a selective basis and recommends that the decision to conduct a comprehensive audit be based on the results of a preliminary survey and be concurred in by the corporation's Board of Directors, provided that in the absence of such concurrence, the Auditor General may take such further action as he deems necessary or advisable.

14. Your Committee concludes that the position taken by the Export Development Corporation with respect to the desir-

ability and feasibility of the comprehensive audit is both satisfactory and acceptable.

15. Your Committee is of the opinion that the position taken by the Canadian Broadcasting Corporation with respect to the efficiency and economy aspects of comprehensive auditing is reasonable. However, your Committee considers that there is no reason why the Auditor General should not conduct a comprehensive audit including a review of the Corporation's procedures for evaluating the effectiveness of its entire operations.

16. Your Committee concludes that the position of Eldorado Nuclear Ltd. is unacceptable; that the refusal of that Corporation to involve itself in a comprehensive audit cannot be justified for the reasons stated; and that a comprehensive audit could benefit the Corporation.

17. A copy of the relevant Minutes of Proceedings and Evidence (*Issues Nos. 7, 8, 15 and 23 of the First Session of the Thirty-second Parliament*) is tabled.

Respectfully submitted,

Bill Clarke
Chairman

FIFTH REPORT OF THE STANDING COMMITTEE ON PUBLIC ACCOUNTS TO THE HOUSE OF COMMONS, APRIL 8, 1981

REPORT TO THE HOUSE

Wednesday, April 8, 1981

The Standing Committee on Public Accounts has the honour to present its

FIFTH REPORT

1. In accordance with its permanent Order of Reference contained in the Standing Orders of the House of Commons, your Committee has considered the Report of the Auditor General of Canada to the House of Commons for the fiscal year ended March 31, 1980 and, in particular, paragraphs 11.7 and 11.8 with respect to the heavy water plants of Atomic Energy of Canada Limited (AECL).

2. The co-operation of the witnesses who appeared before your Committee is acknowledged and appreciated.

3. Your Committee heard testimony on the decisions taken by AECL:

(a) to mothball its La Prade heavy water plant;

(b) to seek forgiveness of the loans from the Government of Canada for the La Prade, Glace Bay and Port Hawkesbury heavy water plants; and

(c) to continue producing heavy water at the Glace Bay and Port Hawkesbury plants.

4. Testimony revealed that the decision in 1973 by AECL to build the La Prade heavy water plant was based on both Canadian and world forecasts of demand for nuclear-generated electricity which were greatly overestimated. Given that the demand for heavy water failed to materialize in the last decade and that excess capacity has been created by new planned production facilities outside the AECL program, your Committee concurs with the corporation's decision in 1978 to mothball the incomplete La Prade plant.

5. With respect to the AECL decision to seek forgiveness of the loans from the Government of Canada for the construction of the La Prade plant and for the acquisition and rehabilitation costs associated with the Glace Bay and Port Hawkesbury plants, your Committee notes that the Government has obtained the approval of Parliament for such forgiveness by means of a supplementary estimate. Your Committee is concerned that indebtedness of this nature and magnitude, caused by miscalculation in AECL forecasting of domestic and world demand for heavy water, has developed. Furthermore, your

Committee questions AECL's plans to stockpile heavy water at an annual cost in excess of \$100 million with no reasonable expectation of immediate sales. Your Committee is greatly concerned that this will lead to further requests for forgiveness of unmanageable debt. Your Committee has not been made aware of any specific safeguards to prevent the recurrence of such indebtedness.

6. The Auditor General observed in his 1980 Report that AECL was carrying the three heavy water plants at a total depreciated net book value of \$765.4 million as of March 31, 1980 and questioned whether the book value of the plants was reasonable. The corporation holds the view that the La Prade plant has no commercial value and that this asset should be written off and that the assets of the other two plants should be written down in light of the forgiveness of the loans.

7. The management of AECL reported that progress had been made in implementing the recommendations of the Financial Management and Control Study. The Auditor General has not had the opportunity to confirm this.

Conclusions and Recommendations

8. Your Committee, after careful consideration of the issues raised in testimony and witnesses' opening statements, concludes that future loans to AECL should be approved on condition that the management of the corporation has introduced sound planning and control mechanisms. The Auditor General should be able to give Parliament an independent assessment as to whether such mechanisms are operating effectively.

9. Your Committee concludes that AECL's major difficulty in capturing overseas markets is Canada's nuclear safeguards policy which insists upon additional bilateral agreements over and above the International Atomic Energy Agency standards to which all Non-Proliferation Treaty member nations must conform, thereby effectively excluding AECL from foreign markets.

10. Your Committee recommends that:

(a) the Government and AECL take measures to increase export sales of CANDU reactors or abandon this program;

(b) the corporation make contingency plans for the closure or mothballing of one or both of its heavy water plants and that these plans be reported to Parliament;

(c) the management of AECL put in place sound planning and control mechanisms or other safeguards so that it will not incur indebtedness that cannot be repaid by the corporation; and

(d) the Auditor General undertake, before the end of 1981, a preliminary survey for a comprehensive audit of AECL.

11. A copy of the relevant Minutes of Proceedings and Evidence (*Issues Nos. 18, 19, and 30 of the First Session of the Thirty-second Parliament*) is tabled.

Respectfully submitted,

BILL CLARKE

Chairman

SIXTH REPORT OF THE STANDING COMMITTEE ON PUBLIC ACCOUNTS TO THE HOUSE OF COMMONS, JUNE 23, 1981

REPORT TO THE HOUSE

Tuesday, June 23, 1981

The Standing Committee on Public Accounts has the honour to present its

SIXTH REPORT

1. In accordance with its permanent Order of Reference contained in the Standing Orders of the House of Commons, your Committee has considered the Report of the Auditor General of Canada to the House of Commons for the fiscal year ended March 31, 1980 and, in particular, Chapter 6—the Comprehensive Audit of the Department of Indian Affairs and Northern Development (the Department).

2. The co-operation of the witnesses who appeared before your Committee is acknowledged and appreciated.

3. Your Committee heard testimony on the major issues arising from the comprehensive audit of the Department, with emphasis on:

(a) the audit of Indian Band trust accounts and the scope of the Auditor General's audit role with respect to these trust accounts;

(b) the transfer of program delivery responsibilities from the Department to Indian Bands;

(c) financial controls over contributions to Indian Bands and the Indian Economic Development Account; and

(d) clarification of the mandate of the Department.

4. In response to an Order of the House made November 15, 1979, the Auditor General has audited a statistical sample of the transactions related to Indian Band trust accounts for the fiscal year 1979-80. He is of the opinion that receipts and disbursements for that year are properly recorded. With regard to previous years, he concludes that because of the unavailability of certain departmental records, an extended audit would be inconclusive and very costly. Your Committee shares this view.

5. The Department has proposed a plan to conduct an internal audit of the 1,146 trust accounts within the next three years. The Auditor General has indicated his willingness to monitor the implementation of this audit plan and assess its methodology. However, representations by the Department and the Auditor General have not yet been made to the Indians and such representations would be advisable in light of the fiduciary nature of the accounts and the fact that the

National Indian Brotherhood and 75 Band Councils have requested that the Auditor General undertake audits of individual trust accounts.

6. The Department stated the underlying principle that governs transfers of program delivery responsibilities to Indian Bands, viz., that Indians should have the responsibility for managing their own communities and providing their own services. While this principle is laudable, your Committee is concerned that a number of the major deficiencies in the administration of these transfers have not yet been adequately addressed by the Department. These are the need to:

(a) upgrade the capabilities of those Indian Bands and Band Councils requiring the same so that they can cope with responsibilities transferred to them;

(b) appoint a "Commissioner" to be responsible for the adequacy of the transfers and control of related departmental overhead;

(c) ensure that the interests of departmental employees are not adversely affected by such transfers (e.g. teachers' job security);

(d) ensure that individual Indians have adequate means of redress if their interests are adversely affected by transfers to a negligent Band Council; and

(e) hold the Department accountable for the implementation of its "General Management Improvement Plan" so that legislative or other measures can be adopted as soon as possible to rectify the deficiencies noted in this paragraph.

7. Your Committee noted that expenditures by Indian Bands are not subject to appropriate accountability processes. The Indians have voiced concerns about inflexible conditions they are required to meet under current contribution agreements. The Department has responded by initiating negotiations with Treasury Board to develop an accountability process which is more appropriate both for the Indians and the Government. Your Committee has sought and has not yet received clarification of the status of these negotiations between Treasury Board and the Department. Your Committee has also not been made aware of the timetable for the resolution of this problem.

8. Your Committee is concerned that the interest rate for funds made available through the Indian Economic Development Account (2% above prime) is unduly high by comparison with rates levied under other federal programs. For example, the Farm Credit Corporation's mortgage interest rate is only 14%.

9. Your Committee noted that the Office of the Comptroller General and the Department have taken measures to improve the administration of the Indian Economic Development Account and have attempted to respond to many of the serious weaknesses in the financial control of the Account identified by the Auditor General. However, your Committee is concerned that the following important problems have not yet been adequately addressed:

- (a) a satisfactory definition of the goals of the Account is lacking;
- (b) the excessive level of departmental overhead charged to the administration of this program; and
- (c) the misuse of the Account such as ill-advised loans for overly large and ambitious projects.

10. Your Committee is concerned that the Department take the necessary steps to clarify its mandate, especially in light of the absence of specific objectives, plans or goals against which its achievements can be measured. This has been an underlying cause of its management control weaknesses. Your Committee wishes to see the implementation of the Department's IMPAC action plan for improvements in this area. Your Committee will review the Department's directional and strategic plans at a later date to ascertain what progress has been made.

Conclusions and Recommendations

11. With respect to the Auditor General's audit of Indian Band trust accounts, your Committee concludes, in light of the lack of precision of the Order of the House of Commons of November 1979 and the absence of complete accounting records, that the Auditor General has discharged his obligations under this Order. At the same time, your Committee noted that the Auditor General was unable to audit any individual trust accounts.

12. With respect to the transfer of program delivery responsibilities to Indian Bands, your Committee concludes that:

- (a) many Indian Bands are unable to cope with transferred responsibilities;
- (b) excessive overhead costs have been charged to the administration of the transfers; and
- (c) there are many deficiencies in the transfer program.

13. Your Committee therefore recommends that:

- (a) the Auditor General undertake an audit of one or more individual Indian Band trust accounts and that he and the Department consult with representatives of the Indians to ascertain the scope of his examination of the accounts;
- (b) the Auditor General monitor the implementation of the Department's internal audit plan for trust accounts;
- (c) the Department appoint a "Commissioner", who would be the designated senior official in the Department to be held accountable for the transfer of responsibilities to Indian Bands;
- (d) Treasury Board take measures to expedite and conclude its negotiations with the Department over the establishment of appropriate controls for contributions to Indian Bands;
- (e) the Department immediately define and implement the goals of the Indian Economic Development Account;
- (f) the Department immediately define its mandate; and
- (g) the Department provide to your Committee by September 1, 1981 a timetable of proposed implementation dates for the foregoing recommendations.

14. A copy of the relevant Minutes of Proceedings and Evidence (*Issues Nos. 27, 28, 29 and 35 of the First Session of the Thirty-second Parliament*) is tabled.

Respectfully submitted,

BILL CLARKE
Chairman

SEVENTH REPORT OF THE STANDING COMMITTEE ON PUBLIC ACCOUNTS TO THE HOUSE OF COMMONS, JUNE 23, 1981

REPORT TO THE HOUSE

Tuesday, June 23, 1981

The Standing Committee on Public Accounts has the honour to present its

SEVENTH REPORT

1. In accordance with its permanent Order of Reference contained in the Standing Orders of the House of Commons, your Committee has considered the Report of the Auditor General of Canada to the House of Commons for the fiscal year ended March 31, 1980 and, in particular, Chapter 5—Comprehensive Audit—House of Commons.

2. The co-operation of the Honourable Jeanne Sauvé, Speaker of the House of Commons, and the other witnesses who appeared before your Committee is acknowledged and appreciated.

Introduction

3. In April 1979, the Speaker of the House of Commons asked the Auditor General to undertake a comprehensive audit of the administrative systems and organization of the House. On November 1, 1979 the Speaker tabled an interim Report by the Auditor General on preliminary findings and recommendations in which he described "significant deficiencies in administrative organizational arrangements, in financial management and control, and in personnel administration in the House of Commons". In response to this Report, the Speaker agreed to undertake a reorganization of the senior management positions, appoint an interim Administrator, and implement the organizational proposals of the Auditor General on an experimental basis.

4. In a final Report for the Speaker in April 1980, the Auditor General proposed an action plan which was accepted. This plan called for the appointment of an Administrator, with deputy head status, to provide leadership and direction for administrative functions. The Clerk of the House was to remain the senior permanent deputy head, responsible for procedural matters. The Sergeant-at-Arms, also with deputy head status, was to be responsible for ceremonial duties as well as for security and access to buildings and other services. All three officials were to report directly to the Speaker and were to constitute an Executive Committee with the Speaker as Chairperson.

5. The action plan also called for the appointment of a Comptroller and a Director General, Human Resources, each reporting directly to the Administrator, and for the development and implementation of policies and procedures necessary to provide effective financial, personnel and operating practices in the House of Commons.

Organization of the House of Commons

6. Your Committee has examined the observations and recommendations of the Auditor General with respect to the organization of the House of Commons. It also held three hearings at which the Speaker and her officials reported on the action taken and planned by the management on these recommendations.

7. Your Committee recognizes that the reorganization of the functional responsibilities of the three senior officials and their reporting relationships, as shown on a House of Commons Organization Chart, dated October 1, 1980, is experimental at this stage. It may be formalized later by amendments to legislation and the Standing Orders as necessary but only if it proves to be operationally efficient and effective.

8. However, your Committee has the following concerns:

(a) the current division of functional responsibilities is a compromise to satisfy short-term needs rather than a solution for long-term organizational problems;

(b) the organizational structure as proposed by the Auditor General in his 1980 Report and subsequently modified and implemented by the Speaker may need to be further modified to consolidate administrative functions in order to avoid overlapping responsibilities and to strengthen the management and accountability processes; and

(c) the methods of appointing senior officers are inconsistent.

9. Your Committee does not intend to recommend any changes in the current organization of the House of Commons at this time. However, it will review the situation at the end of the current fiscal year to determine whether or not it is satisfied that progress has been made by the senior management in achieving its objectives under these new organizational arrangements and that there has been due regard for economy, efficiency and effectiveness.

Need for an Action Plan

10. Evidence before your Committee revealed that there is indeed a great need for improvement in administrative policy and procedures in the House of Commons. Your Committee noted that many of the administrative problems throughout the House of Commons fall in the area of personnel policy. It is clearly evident that policies relating to classification, staffing, and pay and benefits are not well defined. Procedures relating to manpower planning and staff grievances are deficient.

11. The Auditor General's action plan, adopted in April 1980, included the recommendation that the Speaker:

"Develop and implement the policies and procedures necessary to provide effective financial, personnel and operating practices in the House . . . Leadership in this task should be provided by the Administrator".

Your Committee requests therefore that an action plan and time-table for the implementation of these policies and procedures be provided to it by the Speaker by August 31, 1981 so that progress can be monitored.

12. A copy of the relevant Minutes of Proceedings and Evidence (*Issues Nos. 20, 21, 22 and 35 of the First Session of the Thirty-second Parliament*) is tabled.

Respectfully submitted,

BILL CLARKE

Chairman

APPENDIX D

**OPINION AND OBSERVATIONS BY THE AUDITOR
GENERAL ON THE FINANCIAL STATEMENTS
OF THE GOVERNMENT OF CANADA**

(Sections 2 and 3 of the Public Accounts, 1980-81)

THE

PROCEEDINGS OF THE
ANNUAL MEETING OF THE
AMERICAN MEDICAL ASSOCIATION
Held at the Chicago Convention Center
Chicago, Illinois, June 1-5, 1914

Published by the American Medical Association
535 North Dearborn Street, Chicago, Ill.

SECTION 2

1980-81 PUBLIC ACCOUNTS

Audited Financial Statements of the Government of Canada

CONTENTS

Preface to the audited financial statements of the Government of Canada
Statement of transactions
Statement of revenue and expenditure
Statement of assets and liabilities
Statement of use of appropriations
Notes to the financial statements of the Government of Canada
Opinion of the Auditor General on the financial statements of the Government of Canada

PREFACE TO THE AUDITED FINANCIAL STATEMENTS OF THE GOVERNMENT OF CANADA

The accounting policies adopted by the Government and summarized in Note 1 to the financial statements are the result of continuing developments over the years and form the basis for the preparation of the financial statements, designed primarily to provide an accounting of the financial resources appropriated by Parliament. The fundamental requirement to report compliance with legislative authority results in the presentation of financial information in a manner significantly different from that found in the private sector. The accrual basis of accounting used in the private sector best reflects the costs incurred to earn revenues; the policies followed by the Government, under which revenue is on the cash basis and the use of appropriations is on generally the accrual basis, best accommodate reporting to Parliament.

The four financial statements in this section, together with the accompanying notes, are presented for audit in compliance with Section 55 of the Financial Administration Act. These statements form the basis of the Government's accounting for the management of the financial authorities granted by Parliament. Other sections in this volume, together with Volumes II and III of the Public Accounts, are designed to provide information supporting the financial statements.

The first financial statement is the Statement of Transactions, which summarizes all transactions of the Government, as defined in Note 1 (ii), and shows how the financial requirements were met, and the effect of all transactions on the cash balance. The financial transactions are classified into four main categories: budgetary, non-budgetary, foreign exchange and unmatured debt.

The first category, budgetary transactions, consists of all the transactions which enter into the calculation of the annual surplus or deficit of the Government, and includes the receipts from tax and non-tax revenue together with the expenditures authorized by Parliament. Revenue is recognized only when received and does not include amounts due but not collected. Budgetary expenditure, however, is recorded largely on the accrual basis and includes charges for work performed, goods received, services rendered, transfer payments made, amortization of the actuarial deficiencies of the three main superannuation accounts, a provision for estimated losses on realization of recorded assets and accruals for interest on unmatured debt. Fixed assets, which include land, buildings, works and equipment, are not capitalized but are charged to budgetary expenditure at the time of acquisition or construction. Budgetary expenditure does not include amounts payable or accrued at the year end, for contributions paid from statutory appropriations, employee termination benefits, unpaid annual vacation entitlements and the indexing of pensions.

The second category, non-budgetary transactions, includes loans, investments and advances made by the Government, the Government's liability to outside parties from its role of administrator of certain public monies received or collected for special purposes, and other liabilities recorded as a result of the budgetary accruals mentioned above. These transactions account for the change in the financial claims due to or by the Government, in accordance with the accounting policies referred to in Note 1 to the financial statements.

The third category, foreign exchange transactions, reflects transactions with the Exchange Fund Account, required to protect the external value of the Canadian dollar, together with an accounting of the net position of the Government with respect to the International Monetary Fund. Foreign exchange transactions also include unmatured debt payable in foreign currencies.

The fourth category, unmatured debt transactions, represents the extent to which financial requirements have been met through the increase in unmatured debt, that is the net changes in the amounts owing for such debt instruments as marketable bonds, Canada savings bonds and Treasury bills. Unmatured debt transactions exclude unmatured debt payable in foreign currencies.

The second statement is the Statement of Revenue and Expenditure. This statement gives a more detailed accounting of the budgetary transactions summarized in the Statement of Transactions. The annual surplus or deficit represents the difference between the expenditures and the revenues of the year in accordance with the accounting policies previously described.

The third statement is the Statement of Assets and Liabilities. Since this statement is based on the Government's accounting policies, it does not parallel the conventional balance sheet presented in the private sector. More particularly, fixed assets having been accounted for as expenditures, are recorded at the nominal value of \$1, and revenues not yet received, such as uncollected taxes, are not recorded as financial claims. The effect of inflation on the economic value of the Government's reported assets and liabilities has not been reflected. It is generally recognized that inflation tends to reduce the value of financial assets and liabilities while at the same time increasing the recorded value of fixed assets. Thus it should be noted that the difference between the reported assets and liabilities is simply the aggregate of budgetary surpluses and deficits determined in accordance with the accounting policies of the Government; in no way does this difference reflect the Government's net worth.

The fourth statement is the Statement of Use of Appropriations, which summarizes, by department, the use, during the year, of parliamentary appropriations for budgetary expenditure and loans, investments and advances.

GOVERNMENT OF CANADA

Statement of Transactions
for the Year Ended March 31, 1981
(in millions of dollars)

	1981	1980
BUDGETARY TRANSACTIONS		
Revenue	46,507	40,054
Expenditure	- 59,175	- 52,842
Deficit	- 12,668	- 12,788
NON-BUDGETARY TRANSACTIONS		
Loans, investments and advances	- 493	119 ⁽¹⁾
Specified purpose accounts	2,781	2,047 ⁽¹⁾
Other transactions	263	415
Net source	2,551	2,343
Financial requirements (excluding foreign exchange)	- 10,117	- 10,445
FOREIGN EXCHANGE TRANSACTIONS⁽³⁾	1,157	- 128
Total financial requirements ⁽²⁾	- 8,960	- 10,573
UNMATURED DEBT TRANSACTIONS⁽³⁾	11,153	7,878
Change in cash	2,193	- 2,695
CASH BALANCE AT END OF PERIOD	5,931	3,738

The accompanying notes are an integral part of this statement.
Details can be found in other sections of this volume.

⁽¹⁾ For purposes of presenting the transactions of the Government,

^(a) loans, investments and advances include working capital advances to revolving funds, departments and agencies; and,

^(b) specified purpose accounts include the non-interest bearing advances made to the Unemployment Insurance Account.

⁽²⁾ Cash requirement (-).

⁽³⁾ Unmatured debt payable in foreign currencies has been included as part of foreign exchange transactions.

September 15, 1981.

I. A. STEWART,
Deputy Minister of Finance.

D. H. W. KIRKWOOD,
Deputy Receiver General for Canada.

GOVERNMENT OF CANADA

**Statement of Revenue and Expenditure
for the Year Ended March 31, 1981**
(in millions of dollars)

	1981			1980		
	Gross revenue	Revenue credited to appropriations and postal receipts used to defray postal expenditures	Net revenue	Gross revenue	Revenue credited to appropriations and postal receipts used to defray postal expenditures	Net revenue
REVENUE						
TAX REVENUE						
Income tax—						
Personal	19,837		19,837	16,808		16,808
Corporation	8,106		8,106	6,951		6,951
Non-resident	867		867	787		787
Petroleum and gas revenue tax	27		27			
	28,837		28,837	24,546		24,546
Excise taxes and duties—						
Sales tax	5,429		5,429	4,698		4,698
Customs import duties	3,188		3,188	3,000		3,000
Excise duties	1,042		1,042	895		895
Oil export charge	842		842	750		750
Special excise tax—Gasoline	453		453	421		421
Natural gas and gas liquids tax	187		187			
Other taxes	573		573	502		502
	11,714		11,714	10,266		10,266
Other tax revenue	1,658	1,559	99	119	23	96
TOTAL TAX REVENUE	42,209	1,559	40,650	34,931	23	34,908
NON-TAX REVENUE						
Return on investments—						
Bank of Canada	1,459		1,459	1,084		1,084
Canada Mortgage and Housing Corporation	839		839	782		782
Exchange Fund Account	620		620	404		404
Interest on bank deposits	318		318	244		244
Farm Credit Corporation	243		243	210		210
Other return on investments	695	44	651	642	22	620
	4,174	44	4,130	3,366	22	3,344
Postal revenue	1,369	260	1,109	1,337	219	1,118
Privileges, licences and permits	223	104	119	113	15	98
Services and service fees	1,433	1,315	118	463	353	110
Refunds of previous years' expenditure	111		111	197		197
Bullion and coinage	60		60	42		42
Proceeds from sales	259	202	57	205	145	60
Premium and discount on exchange	(1)	(1)		40	(1)	40
Other non-tax revenue	983	830	153	641	504	137
	4,438	2,711	1,727	3,038	1,236	1,802
TOTAL NON-TAX REVENUE	8,612	2,755	5,857	6,404	1,258	5,146
TOTAL REVENUE	50,821	4,314	46,507	41,335	1,281	40,054

	1981			1980		
	Gross expenditure	Revenue credited to appropriations and postal receipts used to defray postal expenditures	Net expenditure	Gross expenditure	Revenue credited to appropriations and postal receipts used to defray postal expenditures	Net expenditure
EXPENDITURE						
Agriculture	890	8	882	782		782
Communications	1,249 ⁽²⁾	79	1,170 ⁽²⁾	870	16	854
Consumer and Corporate Affairs	77		77	73		73
Economic Development	11		11	8		8
Employment and Immigration	4,154	566	3,588	3,728	265	3,463
Energy, Mines and Resources	5,243 ⁽²⁾	1,397	3,846 ⁽²⁾	2,016	4	2,012
Environment	555	18	537	475	19	456
External Affairs	1,096	12	1,084	1,053		1,053
Finance	14,786	5	14,781	12,118	4	12,114
Fisheries and Oceans	368		368	314		314
Governor General	3		3	3		3
Indian Affairs and Northern Development	1,417 ⁽²⁾		1,417 ⁽²⁾	1,126		1,126
Industry, Trade and Commerce	655		655	579		579
Justice	175		175	133		133
Labour	104	10	94	86	11	75
National Defence	5,312	235	5,077	4,600	211	4,389
National Health and Welfare	15,802	20	15,782	14,056	18	14,038
National Revenue	721	44	677	619	38	581
Parliament	130		130	99		99
Post Office	1,857	260	1,597	1,631	219	1,412
Privy Council	68		68	154		154
Public Works	2,298	266	2,032	1,803	53	1,750
Regional Economic Expansion	722		722	628		628
Science and Technology	401	9	392	333	8	325
Secretary of State	2,143	10	2,133	2,022		2,022
Social Development	2		2			
Solicitor General	1,269	214	1,055	1,091	187	904
Supply and Services	941	620	321	304	51	253
Transport	3,052	529	2,523	1,799	169	1,630
Treasury Board	184	12	172	209	8	201
Veterans Affairs	1,006		1,006	933		933
TOTAL DEPARTMENTAL EXPENDITURE	66,691	4,314	62,377	53,645	1,281	52,364
PROVISION FOR VALUATION			- 3,202			478
TOTAL EXPENDITURE			59,175			52,842
NET REVENUE			46,507			40,054
DEFICIT			12,668			12,788

The accompanying notes are an integral part of this statement.

Details of revenue and expenditure can be found in Sections 4 and 5 of this volume and in Volume II.

⁽¹⁾ Less than \$500,000.

⁽²⁾ Includes loans deleted: Communications, \$198 million; Energy, Mines and Resources, \$690 million; and, Indian Affairs and Northern Development, \$148 million.

September 15, 1981.

I. A. STEWART,
Deputy Minister of Finance.

D. H. W. KIRKWOOD,
Deputy Receiver General for Canada.

GOVERNMENT OF CANADA

Statement of Assets and Liabilities

as at March 31, 1981

(in millions of dollars)

	1981	1980	Net increase or decrease (-)
ASSETS			
<i>LOANS, INVESTMENTS AND ADVANCES</i> , Table 6.1, Section 6—			
Crown corporations and agencies, Table 6.4, Section 6—			
Lending institutions—			
Canada Mortgage and Housing Corporation	10,189	10,123	66
Export Development Corporation	1,550	1,569	- 19
Farm Credit Corporation	3,379	3,109	270
Federal Business Development Bank	1,156	1,257	- 101
Municipal Development and Loan Board	158	170	- 12
	16,432	16,228	204
All other Crown corporations and agencies—			
Air Canada	622	635	- 13
Atomic Energy of Canada Limited	881	1,578	- 697
Canadian National Railways	2,753	2,745	8
Petro-Canada	1,444	1,004	440
Other	1,495	1,770	- 275
	7,195	7,732	- 537
Total Crown corporations and agencies	23,627	23,960	- 333
Other loans, investments and advances—			
Provincial and territorial governments	1,078	1,313	- 235
National governments including developing countries, Table 6.8, Section 6	2,942	2,713	229
International organizations	2,255	1,966	289
Less: notes payable	816	637	179
	1,439	1,329	110
Veterans' Land Act Fund advances less allowance for conditional benefits	312	349	- 37
Government controlled corporations	441	439	2
Private sector enterprises	180	142	38
Miscellaneous	265	246	19
	6,657	6,531	126
	30,284	30,491	- 207
Less: allowance for valuation	2,300	3,000	- 700
TOTAL LOANS, INVESTMENTS AND ADVANCES	27,984	27,491	493
<i>OTHER ASSETS</i> , Table 8.1, Section 8—			
Cash in transit	1,846	1,153	693
Unemployment Insurance Account—Non-interest bearing advances		1,013	- 1,013
Working capital advances to revolving funds, departments and agencies		806	- 806
Unamortized bond flotation costs		140	- 140
	1,846	3,112	- 1,266
Less: allowance for valuation		1,970	- 1,970
TOTAL OTHER ASSETS	1,846	1,142	704
<i>FOREIGN EXCHANGE ACCOUNTS</i> , Table 9.1, Section 9—			
Exchange Fund Account—Advances, Table 9.2, Section 9	1,939	3,202	- 1,263
International Monetary Fund—Subscriptions	2,961	2,031	930
	4,900	5,233	- 333
Less: International Monetary Fund—Notes payable	2,329	1,614	715
Special Drawing Rights	1,134	959	175
	3,463	2,573	890
TOTAL FOREIGN EXCHANGE ACCOUNTS	1,437	2,660	- 1,223
<i>CASH</i> , Table 11.1, Section 11	5,931	3,738	2,193
FIXED ASSETS (valued at one dollar), Section 11			
NET RECORDED ASSETS	37,198	35,031	2,167
ACCUMULATED DEFICIT , Table 11.4, Section 11	81,263	68,595	12,668
TOTAL	118,461	103,626	14,835

	1981	1980	Net increase or decrease ()
LIABILITIES			
SPECIFIED PURPOSE ACCOUNTS, Table 7.1, Section 7—			
Canada Pension Plan Account	18,947	16,817	2,130
Less: provincial government securities held by the Canada Pension Plan Investment Fund	17,938	15,981	1,957
	1,009	836	173
Superannuation accounts	23,966	21,562	2,404
Less: unamortized portion of actuarial deficiencies	1,637	1,540	97
	22,329	20,022	2,307
Unemployment Insurance Account	- 228	- 188	- 40
Less: interest bearing loan	110		110
allowance for Government's cost of paying unemployment insurance benefits		- 532	532
	- 338	344	- 682
Government Annuities Account	1,193	1,208	- 15
Deposit and trust accounts	852	611	241
Provincial tax collection agreements account	1,471	743	728
Other	329	300	29
	3,845	2,862	983
TOTAL SPECIFIED PURPOSE ACCOUNTS	26,845	24,064	2,781
OTHER LIABILITIES, Table 8.5, Section 8—			
Interest and matured debt	4,873	4,473	400
Less: unamortized discount on Treasury bills	711	497	214
	4,162	3,976	186
Accounts payable	2,264	1,492	772
Outstanding cheques, warrants and postal money orders	2,293	2,284	9
Undisbursed balances of appropriations to special accounts		18	- 18
Miscellaneous	99	81	18
TOTAL OTHER LIABILITIES	8,818	7,851	967
UNMATURED DEBT, Tables 10.1 and 10.9, Section 10—			
Payable in Canadian currency—			
Marketable bonds	40,795	32,900	7,895
Canada savings bonds	15,812	18,081	- 2,269
Special non-marketable bonds	136	113	23
Treasury bills	21,770	16,325	5,445
	78,513	67,419	11,094
Less: Government's holdings of unmatured debt—			
Marketable bonds	96	179	- 83
Canada savings bonds held on account of employees	107	106	1
Special non-marketable bonds issued to Canada Pension Plan Investment Fund	136	113	23
	339	398	- 59
	78,174	67,021	11,153
Payable in foreign currencies—			
Marketable bonds	2,929	2,990	- 61
Notes and loans payable in foreign currencies	1,707	1,712	- 5
	4,636	4,702	- 66
Less: Government's holdings of unmatured debt—			
Marketable bonds	12	12	
	4,624	4,690	- 66
TOTAL UNMATURED DEBT	82,798	71,711	11,087
TOTAL	118,461	103,626	14,835

The accompanying notes are an integral part of this statement.
Details of assets and liabilities can be found in Sections 6 to 11 of this volume.

September 15, 1981.

I. A. STEWART,
Deputy Minister of Finance.

D. H. W. KIRKWOOD,
Deputy Receiver General for Canada.

GOVERNMENT OF CANADA

**Statement of Use of Appropriations
for the Year Ended March 31, 1981**
(in millions of dollars)

	Appropriations	Used in the current year	Balances		Carried forward	Used in the previous year
			Lapsed	Overexpended		
Agriculture—Budgetary	921	882	18		21	782
Non-budgetary	626	240			386	288
Communications—Budgetary	1,188	1,170	9		9	854
Non-budgetary	15	15	(1)	(1)		4
Consumer and Corporate Affairs—Budgetary	79	77	2			73
Economic Development—Budgetary	13	11	2			8
Employment and Immigration—Budgetary	3,655	3,588	67			3,463
Non-budgetary	35	15			20	22
Energy, Mines and Resources—Budgetary	4,633	3,846	26	(1)	761	2,012
Non-budgetary	1,192	512	83		597	267
Environment—Budgetary	555	537	18			456
Non-budgetary	(1)				(1)	(1)
External Affairs—Budgetary	1,138	1,084	50		4	1,053
Non-budgetary	1,883	375	8	1	1,501	392
Finance—Budgetary	14,784	14,781	3			12,114
Non-budgetary	1,616	181			1,435	5
Fisheries and Oceans—Budgetary	376	368	8			314
Non-budgetary	30	-2			32	-2
Governor General—Budgetary	3	3	(1)			3
Indian Affairs and Northern Development—Budgetary	1,423	1,417	7	1	(1)	1,126
Non-budgetary	90	36	5		49	18
Industry, Trade and Commerce—Budgetary	673	655	20	2		579
Non-budgetary	10,107	-97	11	6	10,199	304
Justice—Budgetary	179	175	4	(1)		133
Labour—Budgetary	95	94	1			75
National Defence—Budgetary	5,051	5,077	1	27		4,389
Non-budgetary	13				13	
National Health and Welfare—Budgetary	15,797	15,782	15			14,038
National Revenue—Budgetary	681	677	4	(1)		581
Parliament—Budgetary	131	130	1	(1)		99
Post Office—Budgetary	1,624	1,597	27			1,412
Privy Council—Budgetary	69	68	1			154
Public Works—Budgetary	2,226	2,032	141		53	1,750
Non-budgetary	4,566	474	11		4,081	946
Regional Economic Expansion—Budgetary	711	722	1	12		628
Non-budgetary	34	-8	17		25	5
Science and Technology—Budgetary	404	392	12			325
Secretary of State—Budgetary	2,146	2,133	12		1	2,022
Social Development—Budgetary	4	2	2			
Solicitor General—Budgetary	1,108	1,055	56	3		904
Non-budgetary	(1)	(1)			(1)	(1)
Supply and Services—Budgetary	533	321	8		204	253
Non-budgetary	14	-2			16	-3
Transport—Budgetary	2,688	2,523	66	2	101	1,630
Non-budgetary	939	25	26		888	123
Treasury Board—Budgetary	243	172	71			201
Veterans Affairs—Budgetary	1,021	1,006	15			933
TOTAL BUDGETARY	64,152	62,377	668	47	1,154	52,364
TOTAL NON-BUDGETARY	21,160	1,764	161	7	19,242	2,369

The accompanying notes are an integral part of this statement.

Details of use of appropriations can be found in Volume II.

(1) Less than \$500,000.

Amounts in roman type are budgetary.

Amounts in **bold face** type are non-budgetary loans, investments and advances.

September 15, 1981.

I. A. STEWART,
Deputy Minister of Finance.

D. H. W. KIRKWOOD,
Deputy Receiver General for Canada.

Notes to the Financial Statements of the Government of Canada

1. Significant Accounting Policies

The accounting policies of the Government of Canada are based on concepts embodied in the British North America Act, the Financial Administration Act and other legislation.

i. Basic concepts

The two basic concepts on which the Government's accounting system is based are found in the British North America Act: first, the concept of the Consolidated Revenue Fund, which emanates from the requirement that all duties and revenues received, other than those reserved to the provinces, "shall form One Consolidated Revenue Fund"; second, the concept that the balance of the Fund, after certain prior charges, "shall be appropriated by the Parliament of Canada".

Parliament provides authority to make payments out of the Consolidated Revenue Fund in annual appropriation acts and other statutes (referred to as statutory appropriations). Spending authority granted in appropriation acts is for stated purposes and maximum amounts. Unless provided for in vote wording, unused spending authority granted in appropriation acts lapses at the end of the year for which granted. Spending authority provided by statutory appropriations is for specified purposes and for such amounts and such time as the acts prescribe. Spending authority provided by statutory appropriations does not lapse at the end of the year in which granted.

ii. Government of Canada as an accounting entity

For purposes of maintaining the Accounts of Canada and preparing the Public Accounts as required by the Financial Administration Act, the Government of Canada is defined as all the departments named in Schedule A of the Act; any division or branch of the Public Service, including a commission appointed under the Inquiries Act, designated by the Governor in Council as a department for purposes of the Financial Administration Act; the staffs of the Senate, the House of Commons, and the Library of Parliament; and, any corporation named in Schedule B of the Financial Administration Act.

In accordance with the above definition, the corporations named in Schedules C and D of the Financial Administration Act are excluded from the Government of Canada as an accounting entity; therefore, their financial statements are not consolidated with those of the Government. The financial statements of these Crown corporations are presented in Volume III of the Public Accounts.

In addition, certain accounts and funds have financial statements which are not combined with those of the Government, but appear separately in Volumes I and II. These accounts and funds include the Exchange Fund Account, the Canada Pension Plan Account, the Unemployment Insurance Account and other similar accounts.

iii. Classification of financial transactions

The financial transactions of the Government as recorded in the Accounts of Canada and reflected in the Public Accounts are classified into budgetary, non-budgetary, foreign exchange and unmatured debt transactions.

In general terms, budgetary transactions enter into the calculation of the annual surplus or deficit and are disclosed on the Government's Statement of Revenue and Expenditure. All other transactions lead to the acquisition or disposal of financial claims or to the creation or discharge of financial obligations, and are disclosed on the Statement of Assets and Liabilities.

For purposes of accounting and reporting, the Public Accounts uses the classification in force at the end of the year to which the report refers, and presents figures for the previous year adjusted where necessary to provide consistency.

iv. Budgetary revenue

Budgetary revenue consists of all tax and non-tax receipts which affect the deficit or surplus of the Government and includes revenue internal to the Government.

The Government generally reports revenue in the year in which it is received, with refunds of revenue allocated to the year in which they are actually paid.

Revenue is reported after deducting refunds paid and excludes amounts receivable, taxes collected on behalf of provinces, receipts from contributors to the Canada Pension Plan, the Unemployment Insurance and the superannuation accounts, and receipts and revenues credited to other asset and liability accounts.

In the Statement of Revenue and Expenditure, revenue is reported both gross and net. The difference between the two is revenue credited to appropriations, and postal receipts used to defray postal expenditures.

v. Budgetary expenditure

Budgetary expenditure consists of all charges to budgetary appropriations which affect the deficit or surplus of the Government. Such charges include those for work performed, goods received, services rendered, and transfer payments made, during the year, and, expenditure internal to the Government.

Expenditure excludes pensions paid under the Canada Pension Plan, superannuation and other pension accounts, Unemployment Insurance payments other than benefits to fishermen, payments financed from undisbursed balances of appropriations to special accounts and payments charged to other asset and liability accounts.

In the Statement of Revenue and Expenditure, expenditure is reported both gross and net. The difference between the two is revenue credited to appropriations, and postal receipts used to defray postal expenditures.

vi. *Assets*

Assets are defined as the financial claims acquired by the Government of Canada on outside organizations and individuals as a result of events and transactions prior to the accounting date.

However, as a result of the Government's accounting policies described above, and in accordance with the provisions of the Financial Administration Act and other legislation, certain financial claims are not reported on the Statement of Assets and Liabilities. The most important of these are accounts receivable for tax and non-tax revenue.

vii. *Liabilities*

Liabilities are defined as financial obligations to outside organizations and individuals as a result of events and transactions prior to the accounting date.

However, as a result of the Government's accounting policies described above, and in accordance with the provisions of the Financial Administration Act and other legislation, certain financial obligations are not reported on the Statement of Assets and Liabilities. These include amounts for: contributions paid from statutory appropriations; annual vacation and benefits payable upon termination of employment; and, actuarial liabilities arising from the indexing to the cost of living, of superannuate pensions and annuities.

viii. *Fixed assets*

The fixed assets of the Government, which include land, buildings, works and equipment, are charged to budgetary expenditure at the time of acquisition or construction. Their existence, however, is acknowledged on the Statement of Assets and Liabilities by reporting them at the nominal value of \$1.

ix. *Accumulated deficit*

The accumulated deficit consists of the annual surpluses and deficits since Confederation, together with the write-off of certain amounts charged directly to this account.

x. *Valuation of assets and liabilities***ASSETS**

Assets are recorded at cost and are subject to annual valuation to reflect reductions from the recorded value to the estimated realizable value.

LIABILITIES

Liabilities are recorded in the amounts ultimately payable except for liabilities for the superannuation accounts of the Canadian Forces, the Public Service and the Royal Canadian Mounted Police, and the Government Annuities Account, which are valued on the actuarial basis.

The Canada Pension Plan Account and the Supplementary Retirement Benefits Account are not maintained on the actuarial basis. The Canada Pension Plan Act limits payments from the Consolidated Revenue Fund to the balance in the Canada Pension Plan Account.

xi. *Translation of foreign currency transactions*

Foreign currency transactions are translated and recorded in Canadian currency equivalents at the exchange rates prevailing at the transaction dates.

Assets and liabilities resulting from foreign currency transactions are, in turn, reported at year-end closing rates of exchange; net gains are credited to revenue, while net losses are charged to expenditure.

2. Changes in Accounting Policies

On July 10, 1980, Royal assent was given to an Act to adjust the Accounts of Canada and to make related amendments to certain other acts. As a result, the following changes in accounting policies occurred:

i. *Revolving funds*

The non-budgetary authorities for all working capital advances to revolving funds, departments and agencies were terminated. Certain revolving fund operations were continued under non-lapsing budgetary authorities; the remainder has been integrated with other budgetary operations.

As a result of these adjustments, working capital advances to revolving funds of \$811 million have been deleted by a charge to departmental expenditure, and revenues and expenditures resulting from the operations of revolving funds have been included in gross reported revenue and gross departmental expenditure of the Government.

ii. *Government's cost of paying unemployment insurance benefits*

The Act also amended the Unemployment Insurance Act to require that the Unemployment Insurance Account be credited commencing April 1, 1980, with the Government's cost of paying benefits on a current fiscal year basis rather than on a lagged calendar year basis. This change has eliminated the need to make non-interest bearing advances to the Account.

As a result of this adjustment, non-interest bearing advances of \$1,013 million and an allowance for the Government's cost of paying benefits of \$532 million have been deleted by a charge to departmental expenditure.

iii. *Other internal accounts*

Certain other assets and liabilities amounting to \$124 million have also been deleted by a charge to departmental expenditure. Assets deleted were unamortized bond flotation costs of \$140 million, while liabilities deleted were undisbursed balances of appropriations to special accounts of \$16 million.

Since 1979, the amounts deleted under this legislation have been fully provided for in the Accounts of Canada. Accordingly, their deletion has had no effect on the deficit for the current or prior year. However, reported revenue and departmental expenditure for the current year are not comparable with amounts reported for the prior year since the effects of the adjustments described above have not been applied retroactively. The Government's stated accounting policies do not provide for retroactive restatement because it is necessary to report expenditure in accordance with authority granted by

Parliament. Had the effects of the adjustments been applied retroactively, it is estimated that revenue and departmental expenditure would have been reported as follows (actual amounts reported are also shown for comparison):

	(in millions of dollars)			
	As reported		If restated retroactively	
	1981 ⁽¹⁾	1980	1981 ⁽¹⁾	1980
Gross expenditure—				
Communications	1,249	870	1,247	938
Employment and Immigration	4,154	3,728	2,609	2,637
Energy, Mines and Resources	5,243	2,016	5,225	2,394
Finance	14,786	12,118	14,646	12,118
Public Works	2,298	1,803	2,308	1,982
Supply and Services	941	304	886	746
Transport	3,052	1,799	2,380	2,078
Other departments	34,968	31,007	34,910	31,060
Total departmental expenditure	66,691	53,645	64,211	53,953
Provision for valuation	- 3,202	478	- 722	1,548
Total gross expenditure	63,489	54,123	63,489	55,501
Gross revenue	50,821	41,335	50,821	42,713
Deficit	12,668	12,788	12,668	12,788

⁽¹⁾ It should be noted that the gross expenditure includes the value of loans deleted during the year. The loans include: Canadian Broadcasting Corporation, \$198 million (Communications); Atomic Energy of Canada Limited, \$690 million (Energy, Mines and Resources); Northwest and Yukon territories, \$148 million (Other departments—Indian Affairs and Northern Development).

3. Allowances for Valuation

As stated in Note 1(x), assets are subject to annual valuation to reflect reductions from the recorded value to the estimated realizable value. The \$5,502 million allowances reported on the Statement of Assets and Liabilities at March 31, 1980 has been reduced to \$2,300 million at March 31, 1981. The change in allowances of \$3,202 million is reported on the Statement of Revenue and Expenditure as the provision for valuation.

The decrease in allowances for loans, investments and advances represents the difference between loans deleted during the year and the additional allowances resulting from the annual valuation.

As a result of the changes in accounting policies stated in Note 2 above, no allowances were required in 1981 for accounts internal to the Government and for the Government's cost of paying unemployment insurance benefits. The following table summarizes the allowances for valuation:

	(in millions of dollars)		
	1981	1980	Net increase or decrease (-)
Loans, investments and advances	2,300	3,000	- 700
Other assets and liabilities (accounts internal to the Government)		1,970	- 1,970
Government's cost of paying unemployment insurance benefits on a current fiscal year basis		532	- 532
	2,300	5,502	- 3,202

4. Contingent Liabilities of the Government of Canada

A contingent liability is a potential liability which may become an actual liability should certain events occur. The

contingent liabilities of the Government consist of explicit guarantees by the Government, and potential losses arising from pending and threatened litigation relating to claims and assessments in respect of breach of contract, damages to persons and property, and like items.

The contingent liabilities of the Government as at March 31, 1981 amounted to \$4,171 million and are summarized in the following table:

	(in millions of dollars)	
	1981	1980
i) Explicit guarantees by the Government:		
Obligations of entities that are not agents—		
Borrowings by Crown corporations	189	530
Borrowings by other than Crown corporations	1,335	1,245
Other explicit guarantees	919	721
ii) Pending and threatened litigation	1,728	1,482
	4,171	3,978

Details can be found in Section 11 of this volume.

5. Financial Information Regarding Agent Crown Corporations

All assets and liabilities of agent Crown corporations are assets and liabilities of the Government, due to the agency relationship. However, in accordance with the accounting policies of the Government, the accounts of agent Crown corporations are not consolidated with those of the Government and only the financial transactions between the Government and agent Crown corporations are recorded in the Accounts of Canada.

Although borrowings by agent Crown corporations from lenders other than the Government are considered direct liabilities of the Government, such borrowings are not included in the Accounts of Canada since they are intended to be, and in practice are, repaid directly by the corporations.

The following table summarizes financial information regarding agent Crown corporations as at March 31, 1981. The information has not been audited since certain of these corporations have financial year-ends other than March 31.

	(in millions of dollars)	
	1981	1980
ASSETS		
Claims against the Government	748	482
All other assets	31,987	29,851
TOTAL ASSETS	32,735	30,333
LIABILITIES		
Obligations to the Government	17,917	18,945
Borrowings from lenders other than the Government	5,630	4,385
All other liabilities	4,409	3,683
TOTAL LIABILITIES	27,956	27,013
EQUITY OF THE GOVERNMENT		
Share capital and contributed surplus	3,905	2,923
Retained earnings	874	397
TOTAL EQUITY	4,779	3,320
TOTAL LIABILITIES AND EQUITY	32,735	30,333

Details can be found in Section 6 of this volume.

6. Insurance Programs

Certain agent Crown corporations operate insurance programs. In the event that such corporations did not have sufficient funds to meet their obligations, the Government would provide the required financing through appropriations, either budgetary or non-budgetary.

The following table summarizes information regarding such insurance programs. The information has not been audited since the corporations have financial year-ends other than March 31.

Programs	(in millions of dollars)			
	Insurance in force	Net claims*	5 year average of net claims	Amount of fund or provision
Canada Deposit Insurance Corporation				
Current year	96,078	21	21	148
Previous year	82,516			126
Canada Mortgage and Housing Corporation				
Mortgage insurance fund				
Current year	29,706	174	173	293
Previous year	26,731	436	140	481
Home improvement loan insurance fund				
Current year	25			6
Previous year	25			5
Rental guarantee fund				
Current year				12
Previous year				11
Export Development Corporation				
Accounts administered for the Government				
Current year	326	(1)	(1)	
Previous year	440	(1)	(1)	
Export insurance contracts entered into on its own behalf				
Current year	1,693	8	2	7
Previous year	1,308	5	2	10

* Refers to the difference between claims and amounts received from sales of related assets and other recoveries.

(1) Less than \$500,000.

7. International Development Assistance—Loans and Subscriptions

i. Loans to developing countries

Included in loans to National governments of \$2,942 million (\$2,713 million in 1980) are loans to developing countries in the amount of \$2,149 million (\$1,896 million in 1980). These loans are part of Canada's international development assistance program and are either interest-free or bear interest at rates that were more favourable than those prevailing in Canada at the time the assistance was provided. The balances outstanding at March 31, grouped by term, are:

Term	Grace period before repayment commences	Interest rate	(in millions of dollars)	
			1981	1980
20 years	5 years	5%	19	
25 years	5 years	6%	2	2
30 years	7 years	3%	168	137
30 years	7 years	*	2	
35 years	5 years	*	4	4
40 years	10 years	*	1	1
50 years	10 years	*	1,953	1,752
			2,149	1,896

* Interest-free.

During the year, loan interest and commitment/service charges of \$3.9 million (\$2.5 million in 1980) was received from developing countries. Details can be found in Sections 6 and 13 of this volume and in Section 8 of Volume II.

ii. Subscriptions and loans to international organizations

Included in Loans, investments and advances—International organizations of \$2,255 million (\$1,966 million in 1980) are subscriptions to the capital of the International Development Association and loans to other international financial institutions of \$1,877 million (\$1,606 million in 1980). These subscriptions and loans are also part of Canada's development assistance program. These institutions make loans to developing countries on terms similar to the loan assistance set out above. Subscriptions to international organizations do not provide a return on investment. They are repayable on termination of the organization or on Canada's withdrawal therefrom. Details can be found in Sections 6 and 13 of this volume.



OPINION OF THE AUDITOR GENERAL ON THE FINANCIAL STATEMENTS OF THE GOVERNMENT OF CANADA

I have examined the following financial statements of the Government of Canada for the year ended March 31, 1981:

- Statement of Transactions;
- Statement of Revenue and Expenditure;
- Statement of Assets and Liabilities; and
- Statement of Use of Appropriations.

My examination was made in accordance with generally accepted auditing standards and included such inquiries, tests and other procedures as I considered necessary to enable me to report as required by Section 6 of the Auditor General Act.

In my opinion, these financial statements present information in accordance with the stated accounting policies of the Government of Canada as set out in Note 1 to the financial statements. Further in my opinion, except for the changes in accounting policies relating to revolving funds and the Government's cost of paying unemployment insurance benefits, the effect of which is described in Note 2, the accounting policies are consistent with the preceding year.

I have the following reservations concerning certain of the stated accounting policies of the Government of Canada.

- In accordance with Notes 1(vi) and (x) to the financial statements, the full amounts of special assistance loans to developing countries and subscriptions to the special development funds of international financial institutions are recorded as assets. As described in Note 7, most of the loans are repayable over 50 years without interest, with no payments for the first 10 years. Loans with similar terms are made from the special development funds of international financial institutions. These loans and subscriptions by their terms confer financial benefits, the cost of which, in my opinion, should be included in the Statement of Revenue and Expenditure in the year of the transactions by providing an allowance against the loans and subscriptions. This allowance would be taken into revenue over the next 30 to 50 years in the case of loans, and over a longer period in the case of subscriptions. I have estimated that the adoption of such a practice would reduce reported assets and increase accumulated deficit by approximately \$3.4 billion as at March 31, 1981 (\$3.0 billion as at March 31, 1980).
- As stated in Note 1(vii), certain financial obligations are not recorded. I have estimated that recorded liabilities and accumulated deficit would be increased by approximately \$5.6 billion as at March 31, 1981 (\$4.7 billion as at March 31, 1980) if financial obligations at that date related to contributions paid from statutory appropriations, employee termination benefits and the indexed portion of pensions for persons now retired were recorded. This estimate does not include unrecorded financial obligations related to earned and unpaid annual vacation leave and the indexed portion of pensions for persons not yet retired. In my opinion, all these financial obligations should be appropriately recorded and reported in the financial statements to provide a more complete disclosure of liabilities.

Additional information and comments on these reservations are included in my observations on the financial statements in Section 3 of this volume.

Ottawa, Canada
September 15, 1981

KENNETH M. DYE, F.C.A.
Auditor General of Canada



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SECTION 3

**1980-81
PUBLIC ACCOUNTS**

Observations by the Auditor General on the Financial Statements of the Government of Canada

CONTENTS

Introduction
International development assistance—Loans and subscriptions
Unrecorded liabilities
Reporting of summary financial information to Parliament

Observations by the Auditor General on the Financial Statements of the Government of Canada

Introduction

I have examined the financial statements of the Government of Canada for the year ended March 31, 1981, which together with my opinion, are included in Section 2 of this volume. These financial statements are the Statement of Transactions, the Statement of Revenue and Expenditure, the Statement of Assets and Liabilities, and the Statement of Use of Appropriations.

My examination was made in accordance with generally accepted auditing standards and included such inquiries, tests and other procedures as I considered necessary to enable me to report as required by section 6 of the Auditor General Act. This section provides that:

"The Auditor General shall examine the several financial statements required by section 55 of the Financial Administration Act to be included in the Public Accounts, and any other statement that the Minister of Finance may present for audit and shall express his opinion as to whether they present fairly information in accordance with stated accounting policies of the federal government and on a basis consistent with that of the preceding year together with any reservations he may have."

My opinion includes two reservations concerning certain of the stated accounting policies of the Government of Canada. These reservations were included in the Auditor General's opinion last year. The observations that follow provide additional explanatory information on the reservations.

The observations also deal with the reporting of summary financial information to Parliament. In these observations, I comment on the need for generally accepted accounting principles appropriate for governments, the need for improved disclosure in explanatory notes to the financial statements, the need to reconsider the current and potential use of financial statements for government and the information they should display, and the need for strong central direction by the Comptroller General of Canada.

International Development Assistance—Loans and Subscriptions

In accordance with Notes 1(vi) and (x) to the financial statements, the full amounts of special assistance loans to developing countries and subscriptions to the special development funds of international financial institutions are recorded as assets. These loans and subscriptions by their terms confer financial benefits on developing countries, the cost of which is not included in the Statement of Revenue and Expenditure in the year the loans and subscriptions are made. If this cost were so recorded, reported assets would be decreased and accumulated deficit increased by approximately \$3.4 billion as at March 31, 1981 (approximately \$3.0 billion as at March 31, 1980).

Canada provides assistance to developing countries by making grants and contributions and special assistance loans to them and by subscribing to special development funds of international financial institutions. The grants and contributions and the loans and subscriptions all confer financial benefits on developing countries. The grants and contributions, because they are not repayable or otherwise recoverable, are made under budgetary authority, recorded as expenditure and included in the deficit. The loans and subscriptions, because they are repayable or considered to be eventually realizable, are made under non-budgetary authority and recorded as assets.

Special assistance loans and subscriptions to special development funds are, like grants and contributions, an important part of Canada's official program of assistance to developing countries. Over the past 12 years, such loans and subscriptions increased from an accumulated balance of approximately \$200 million before 1969 to approximately \$4,000 million at March 31, 1981. During the same period, approximately \$5,000 million of assistance was provided to developing countries in the form of grants and contributions.

The amount of special assistance loans included in loans to national governments at March 31, 1981 is \$2,149 million. Of these loans, \$1,953 million are repayable over 50 years without interest, with no payments for the first 10 years. Additional information concerning these special assistance loans is presented in Note 7 to the financial statements and on pages 6.29 and 6.30 of Section 6 of this volume. At March 31, 1981, subscriptions to special development funds of international financial institutions amounted to \$1,877 million. These special development funds make loans to developing countries with terms similar to the special assistance loans made by Canada. The terms of these subscriptions provide that, on withdrawal from or termination of the special development funds, Canada will receive a pro-rata share of the funds' assets. Because of the nature of such assets, it would take many years for Canada to realize its share on termination or withdrawal. Additional information concerning these subscriptions is also presented in Note 7 to the financial statements, and on pages 6.31 through 6.33 of Section 6 of this volume.

As described above, amounts expended by the Government in the current and prior years in respect of special assistance loans and subscriptions to special development funds will be recovered or realized without interest over a significant number of years. Since interest is not provided, the Government is not compensated for the use of its funds over the period the loans and subscriptions are outstanding. Since the Government is not compensated for the use of its funds, the present value of the amounts to be recovered or realized in the future is much less than the amounts expended today.

As stated in the Study of the Accounts of Canada: "Ideally, the Government's Statement of Assets and Liabilities should come as close as possible to reflecting the true economic value of the assets and liabilities recorded on it". For example, a Treasury bill, which does not bear interest, is recorded as a liability by the Government at an amount determined by discounting (expressing at present value) future payments of principal at a rate set by public auction at the date of issue. The difference between the amount payable and the amount at which the Treasury bill is recorded—the discount—is the amount of compensation the Government pays for the use of borrowed funds. This compensation is included in interest on the public debt over the period the bill is outstanding.

Sometimes a market value for financial claims and obligations is not available, and an alternative approach is required. For example, when a loan is made to a Crown corporation by the Government, it is recorded as an asset at the amount advanced. To compensate for the use of its funds, the Government charges interest on the loan. In the absence of a market-determined interest rate, the Government calculates an arbitrary rate by reference to its cost of borrowing. Accordingly, the amount at which the loan is recorded is equal to the present value of future repayments of principal and interest, discounted at this rate to the date of issue.

Special assistance loans and subscriptions to special development funds should be similarly recorded at their present value through discounting, at an appropriate rate, amounts that will be recovered or realized in future years. As with loans to Crown corporations, the selection of an appropriate rate is, to some extent, arbitrary. However, it would seem reasonable to determine a rate by reference to the Government's cost of borrowing in the same manner as rates are set for loans to Crown corporations.

Discounted at the Government's long-term borrowing rate for the year of the transactions, the amount that will be recovered or realized in future years in respect of special assistance loans or subscriptions to special development funds is approximately \$600 million at March 31, 1981. In my opinion, this is the amount at which these loans and subscriptions should be recorded in the accounts of Canada at the year end. The difference of \$3,400 million between the amount at which they are currently recorded (\$4,000 million) and the amount at which they should be recorded (\$600 million) represents the cost to the Government of the benefit conferred on developing countries by the terms of these loans and subscriptions. This cost should be recorded by providing an allowance against the loans and subscriptions. This allowance, in the case of loans, would be taken into revenue over the next 30 to 50 years, their terms to maturity. In the case of subscriptions, the allowance would be taken into revenue commencing in the year of Canada's withdrawal from, or the termination of, the special development funds. The period over which the allowance would then be taken into revenue

would correspond to the maturity of the loans outstanding in the funds at the time of such termination or withdrawal.

In its Report dated February 21, 1979, the Standing Committee on Public Accounts recommended that the Office of the Comptroller General expedite a study to establish an appropriate basis for valuing loans to developing countries and subscriptions to international financial institutions, and that it report back to the Committee as soon as possible. The Committee also recommended that appropriate information regarding the loans and subscriptions be disclosed in the notes to the financial statements. As mentioned earlier, Note 7 to the financial statements provides such additional information. The Government has considered what basis is appropriate for valuing such loans and subscriptions and has concluded that, because they are financial claims on outside organizations and therefore assets as defined in Note 1(vi), they should be recorded at cost. In the Government's view, cost is the full amount expended in respect of the loans and subscriptions rather than the present value of amounts that will be recovered or realized in future years. Although there is general agreement that benefits are conferred, the Government considers that the cost of such benefits is indirectly recognized in the accounts and included in the deficit in future years as costs of financing the amounts expended are incurred, and that it is sufficient to disclose the terms of loans and subscriptions outstanding at the year end in a note to the financial statements.

In my opinion, the cost of benefits conferred by the terms of special assistance loans to developing countries and subscriptions to special development funds of international financial institutions should be recorded in the accounts of Canada and included in the Government's Statement of Revenue and Expenditure in the year the loans and subscriptions are made. In addition to recognizing such costs at the time the benefits are conferred, this would result in loans and subscriptions being reported at amounts that more closely reflect their economic value.

Unrecorded Liabilities

The Government has defined liabilities as financial obligations to outside organizations and individuals as a result of events and transactions prior to the accounting date. However, under its stated accounting policies and provisions of the Financial Administration Act and other legislation, certain financial obligations that fit this definition have not been recorded. These unrecorded liabilities include financial obligations at the year end related to contributions paid from statutory appropriations, employee termination benefits, and actuarial liabilities arising from the indexing to the cost of living of superannuation annuities (pensions) for former public service employees (including Canadian Forces and Royal Canadian Mounted Police) or their survivors. My Office has estimated that these unrecorded liabilities amount to approximately \$5,600 million at March 31, 1981 (\$4,700 million at March 31, 1980). In addition to these estimated amounts, there are other financial obligations, related to earned and unpaid annual vacation leave and the indexed portion of pensions for persons not yet retired, that also fit the Government's definition of liabilities but are not recorded.

Following is a summary of those unrecorded liabilities which have been estimated:

	(in millions of dollars)	
	1981	1980
Amounts related to contributions paid from statutory appropriations		
Subsidies under the Railway Act	200	170
Other		30
	200	200
Employee termination benefits	1,200	1,200
Present value of indexed portion of pensions for persons now retired	4,200	3,300
	5,600	4,700

The liability for subsidies under the Railway Act has been estimated by the Canadian Transport Commission. The liability for employee termination benefits, and the present value

of the indexed portion of pensions for former public service employees (including Canadian Forces and Royal Canadian Mounted Police) or their survivors, were estimated by the Department of Insurance based on methods and assumptions used by the Department for purposes of current actuarial reports on the Government's superannuation accounts.

Unrecorded liabilities for earned and unpaid annual vacation leave have not been estimated by my Office because the information required was not readily available during our audit. However, based on annual salary and wage costs, they are also likely to be substantial. The Government should estimate these unrecorded liabilities at the end of each fiscal year by reference to personnel and other records maintained by departments and agencies.

With respect to the indexing of employee pensions, determination of an appropriate liability is somewhat more complex. As a minimum, the liability should include the present value of the indexed portion of pensions for persons now retired. This minimum liability would not include provision for any further increases in these indexed benefits related to increases in the cost of living in future years. The \$4,200 million estimate by the Department of Insurance referred to above has been prepared on this basis. This estimate is also presented on page 7.7 of Section 7 of this volume.

The liability for indexing employee pensions should include some provision for the indexed portion of benefits for persons who have not yet retired and for future indexing for persons now retired as discussed in the preceding paragraph. However, the determination of appropriate amounts is a matter requiring further study. The additional liability may be significant. In my opinion, the Office of the Comptroller General, in consultation with other members of the accounting profession with background in pension issues and with the Chief Actuary of the Department of Insurance, should examine alternative methods of accounting for pension costs and obligations and determine an appropriate basis of recording and disclosing actuarial liabilities and related pension costs arising from the indexing to the cost of living of superannuation annuities.

Based on the definition of liabilities as financial obligations to outside organizations and individuals as a result of events and transactions prior to the accounting date, the exclusion from reported liabilities of the significant financial obligations described above results in an incomplete reporting of liabilities as defined. This directly affects the reported accumulated deficit and financial position at the year end. In my opinion, financial obligations at the year end related to contributions paid from statutory appropriations, employee termination benefits, earned and unpaid annual vacation leave, and actuarial liabilities arising from the indexing to the cost of living of superannuation annuities should be appropriately recorded in the accounts of Canada and reported in the financial statements to provide a more complete accounting and disclosure of liabilities.

Reporting of Summary Financial Information to Parliament

In his 1979 and 1980 observations on the Government's financial statements, the Auditor General called attention to the need for:

- generally accepted accounting principles appropriate for governments;
- improved disclosure in explanatory notes to the financial statements;
- reconsideration of the current and potential use of financial statements for government and the information they should display; and
- strong central direction by the Comptroller General of Canada.

In the following sections of this observation, I comment on each of these matters.

Need for government accounting principles

The Government of Canada prepares its financial statements in accordance with stated accounting policies. These accounting policies are primarily based on concepts found in the British North America Act, as described in Note 1(i), together with other legislative provisions and administrative conventions that have evolved over the years. However, there are no generally accepted government accounting principles to provide objective standards of good accounting and reporting practice to which readers of the financial statements could refer and against which the statements could be audited.

In 1976, the Canadian Institute of Chartered Accountants (CICA) created a Study Group to catalogue existing practices in legislative accounting, reporting and auditing and to review underlying objectives and concepts. For the most part, members of the Study Group were drawn from the federal and provincial governments, including representatives from this Office and from the Office of the Comptroller General of Canada. In 1980, the Study Group issued its report, entitled *Financial Reporting by Governments*. In the Report, the Study Group concluded that there is a need for generally accepted reporting standards for federal and provincial governments to achieve consistency in financial reporting and comparability between governments.

The Study Group also concluded that the CICA should take the initiative in encouraging the establishment of a body to work toward the development of generally accepted government reporting standards. In June 1981, the CICA announced the establishment of a new Government Accounting and Auditing Committee to recommend accounting and auditing principles and practices for use by governments. I am pleased to report that senior personnel from both this Office and the Office of the Comptroller General of Canada are members of this committee.

Need for improved disclosure in notes to financial statements

As in prior years, important summary information relevant to the Government's financial position and its revenues and expenditures is excluded from the notes to the financial statements in Section 2 of Volume 1 of the Public Accounts. Although there is selective referencing of amounts in the financial statements to summary information in other sections of this volume, this summary information is presented in the midst of other more detailed information which may inconvenience and confuse a reader who is looking for a complete overview of the Government's financial position, revenues and expenditures.

For example, in response to a recommendation of the Standing Committee on Public Accounts in its Report dated February 21, 1979, the Government introduced Note 7 to the financial statements to summarize the terms and conditions of international development assistance loans and subscriptions. Although it is my view that the cost of the financial benefit conferred by these loans and subscriptions should be recorded in the accounts of Canada in the year the loans and subscriptions are made, Note 7 does provide important summary information related to significant components of loans to national governments and subscriptions to international organizations as reported on the Statement of Assets and Liabilities.

I would encourage the Government to develop similar notes for other significant balances reported in the audited financial statements in Section 2. This would permit readers to have ready access to the summary information they need to understand the statements without having to constantly refer to information presented in the various other sections of Volume 1. Since most of the information required to do so is currently available, much can be accomplished with little effort.

Need to reconsider purposes of financial statements

The current and potential use of summary financial statements and the information they should display need to be reconsidered. The nature and extent of information reported in financial statements and how it is presented depend on the objectives that the statements are designed to satisfy. Although the financial statements included in Section 2 of this volume are entitled "The Financial Statements of the Government of Canada", they include only government departments as defined in the Financial Administration Act. Because many activities of government are carried out by organizational units other than government departments, significant assets, liabilities, revenues and expenditures are excluded from the existing financial statements. There is a need for summary financial statements that provide a comprehensive and complete summary of the Government's financial position and its revenues and expenditures.

In his 1980 observations, the Auditor General stated that the Office of the Comptroller General planned to study the purposes of summary financial reporting for the Government and the feasibility of developing comprehensive financial statements. We have been advised by the Comptroller General that this important study has commenced.

Need for central direction

Under the Financial Administration Act, the Treasury Board, the Minister of Finance and the Receiver General for Canada all have certain responsibilities for developing accounting policies and preparing the Government's financial statements. The development of generally accepted government accounting principles and comprehensive summary financial statements will require strong central direction and leadership within the Government of Canada. In 1979 and 1980, the Auditor General recommended that central direction should be provided by the Comptroller General of Canada and that the Treasury Board should be given primary responsibility for the Government's accounting and financial reporting policies. Appropriate amendments to the Financial Administration Act have not yet been made to vest this responsibility and authority in the Treasury Board and the Comptroller General.



Table 1: Data Series 1									
Year	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1
2000	10	15	20	25	30	35	40	45	50
2001	12	18	22	28	32	38	42	48	52
2002	14	20	24	30	34	40	44	50	54
2003	16	22	26	32	36	42	46	52	56
2004	18	24	28	34	38	44	48	54	58
2005	20	26	30	36	40	46	50	56	60
2006	22	28	32	38	42	48	52	58	62
2007	24	30	34	40	44	50	54	60	64
2008	26	32	36	42	46	52	56	62	66
2009	28	34	38	44	48	54	58	64	68

Table 2: Data Series 2									
Year	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1
2000	5	10	15	20	25	30	35	40	45
2001	6	12	18	22	28	32	38	42	48
2002	7	14	20	24	30	34	40	44	50
2003	8	16	22	26	32	36	42	46	52
2004	9	18	24	28	34	38	44	48	54
2005	10	20	26	30	36	40	46	50	56
2006	11	22	28	32	38	42	48	52	58
2007	12	24	30	34	40	44	50	54	60
2008	13	26	32	36	42	46	52	56	62
2009	14	28	34	38	44	48	54	58	64

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